SPHA … MUNDI

Per circulos tam primarios quam secundarios cum punctis, lineis et angulis notabilioribus, in t… pectu Horizontis situ, pro motu stellarum primo aliisq; harum Phænomenis in genere tradendis, exhibita

à Ioh. Gabr. Doppelmaiero, Math. Prof. Publ. Acad. Imper. L… - Carolinæ Naturæ curiosorum et Acad. Scient. Regiæ Prussicæ Socio.

Opera *Ioh. Bapt. H…* Sac. Cæs. Maj. Geogr. Noribergæ.

Cum P… Cæs. Majestatis.

De circulis, punctis, lineis et angulis Sphæræ insignioribus.

Inter circulos Sphæræ mundanæ eminent majores, tanquam primarii, quatuor,
I. *Æquator* Æ Q, *cujus Poli* P *et* P, *iidem cum Polis mundi, axis linea* P P.
II. *Ecliptica* E C, *hujus Poli* R *et* R, *axis, linea* R R.
III. *Horizon, qui duplex, rationalis* H O *et sensibilis* S B, *quorum Poli* Z *et* N *Zenith et Nadir, axis* Z N.
IV. *Meridianus* H Z O N *cujus Poli in Horizonte rationali ad* T *et* T, *in puncto veri ortus et occasus.*
Secundarii varii sunt, et quidem tam majores quam minores, qui primarios respiciunt, alii enim sunt:
1) *respectu Æquatoris majores, circuli ascensionum, rectarum v. g.* P A P, *inter hos etiam sunt Coluri equinoctiorum* Z T N *et Col. Solstitiorum* H Z O N, *minores et cum eodem paralleli, circuli declinationum* D A H (Fig. I) *inter quos præcipui, 2 Tropici, Tropicus cancri* I C *et Tropicus capricorni* E K. *2 Polares. Polaris arcticus* R F *et antarcticus* R G.
2) *respectu Ecliptices alii majores, circuli longitudinum v. g.* R I, R, *alii minores, paralleli Ecliptices, circuli Latitudinum dicti, ex his præprimis notandi circuli ex cursuum* U U U U.
3) *respectu Horizontis, majores* (Fig. II) *sunt circuli verticales s. azimuthales, v. g.* Z T N. *minores et paralleli, circuli altitudinum s. circ. Almucantarath, ad* P V. *Inter hos verticales palmarii sunt: verticalis primarius* Z T N *et Nonagesimi, gradus circulus, qui per verticem et per Ecliptices polos transit, et hic cum meridiano coincidit.*
Concursu horum circulorum varii anguli occurrunt, et primo quidem primariorum cum primariis:
1. *Ang. Æquatoris et Horizontis* Q T O *vel* Æ T H (2) *Ang. Æquatoris et Ecliptices* E T Æ *vel* C T Q *qui obliquitas Ecliptices dicitur* (3) *Ang. Ecliptices et Horizontis* O T C. *Ang. Orientis dictus.* (4) *Ang. Ecliptices cum meridiano* T C Q. *Tandem primariorum cum secundariis* (1) *Ang. Æquatoris cum verticali primario* (2) *Ang. Æquatoris cum alio verticali* (3) *Ang. Ecliptices et verticalis* (4) *Ang. Ecliptices et circuli declinationis.* (5) *Ang. Horizontis et circuli declinationis* (6) *Ang. Meridiani et verticalis* (7) *Ang. Meridiani et circ. Ascens. rectæ. &c.*

De vario corporum et punctorum cœlestium situ.

E motu siderum et punctorum in cœlo notabilium diversus oritur situs, hic in singulis et respectivus et absolutus, respectivus est cum eadem ad alia corpora et puncta, maxime vero ad circulos Sphæræ primarios mediantibus secundariis per distantias sphæricas, h. e. per arcus expenduntur, talis distantia dicitur.
I. *respectu Æquatoris ad* T W (Fig. I.) *Ascensio recta, alia Declinatio, quæ duplex borealis* A W *et australis, a v.*
II. *respectu Ecliptices* T X *longitudo, et latitudo, quæ pariter duplex borealis* I. X. *et australis* I. x.
III. *respectu Horizontis, cum oritur stella* (Fig. II) *in* Y. G Y. *Azimuthum,* Y T *amplitudo orientis, complementum prioris ad 90.* Y T (*in Fig. I*) *amplitudo occidua, ubi ad* Y. *occasus hujus. Isti ad Æquatorem simul relati ortus et occasus astronomicus, vel Sphæricalis ascensio et descensio, quæ recta et obliqua, ad horizontem vero et solem simul relatis, ortus et occasus poëticus dicuntur,* V Y. *altitudo Stellæ v. v. profunditas Stellæ* (Fig. II.)
IV. *Respectu meridiani, ad* D (Fig. I) *culminatio Stellæ, et simul ad Horizontem* D O. *altitudo ejus meridiana, et ad Æquatorem simul mediatio cœli ad* Q, *hinc* D A. *elongatio a Meridiano vocatur. Situs absolutus, qui locus dicitur, vel physicus, ut in p.* (Fig. V) *vel opticus ut ad a. et v. est: quorum unus e contro Terræ c. ad v. verus, alter a superficie terræ in t. ad a. apparens, hunc partim parallaxes* (*in Fig. V*) *partim refractiones* (*in Fig. VI.*) *a vero, in Horizonte magis, circa verticem minus dissentiantem sistunt.*

Fig. I

Fig. II

Fig. III.

Fig. V.

Fig. VI.

SYSTEMA SOLAR… ET PLANETARIUM

ex hypothesi Copernicana secundum elegantissimas Illustriss… quondam Hugenij deductiones novissime collectum & exhibitum a IOHANNE BAPT… ANNO NORIBERGÆ. Cum Privilegio Sac. Cæs. Majestatis.

Magnitudines corporum Planetariorum respectu Solis Geometrice exhibite.

Saturnus

SOL

Iupiter

Terra Mars Venus Mercurius

Typus macularum et Planetarum Facies diversa.

Benevole Spectator.

Innumerabilem FIXARUM exercitum isthoc pusillo schemate tibi considerâdũ proponimus, quæ non, velut opaca Planetarũ corpora, mutuatitiæ Solis lumine, sed innata sibi luce totidem SOLES radiant suis quoque admodũ Solibus nostri, haud dubie Planetis, quibus radios suos impertiantur, circumdatæ, non enim frustra illuc à Creatore positas esse arbitramur. At distantiam à planetario systemate etiam aliqua proportione metiri, nec numerus, nec arca ulla nobis suppeteret. Nam perpende, qualem in suo Cosmotheoro Hugenius argumentis satis probabilibus deduxit eam quippe distantiæ Telluris à Sole habere rationem, quæ vix est unitatis ad 27604. ut proinde globus terrimentarius, qui ex Tellure nostra explosus Solem diu post 25 annis fere attingeret, ad stellam Sixty Fixarum proximam, non nisi spatio annorum 691200 (perceptu horrendum) pertingeret. Orbem igitur Magnum ad distantiam a Fixis puncti tantum habere rationem omnino necesse est.

ORBITA SATURNI

SATURNUS cum satellitibus suis circumeundo Solem periodum… annis 29 ℞ arbitramur… ejus emergere non nisi… Iovem spectant, ceteris Solis… hinc tam magnam esse… ut Iupiter ultra 37 gradus… a Sole Saturnicolis idem esse… quod nobis Venus. Notandum… arteria pulsibus 3. experiendo… ad Solem vix annis 25 o ferretur… fere 291225840 Mill. Germ.

SYSTEMA SATURNI

Circuit. diebus 10. horis 14. min. 14

Circuit. diebus 15. horis 22. min. 41

Circuit. diebus 29. hor. 7. min. 54

SATURNI quinque SATELLITES ab ejus centro distant diametris annuli Saturnium ambientis:

Primus 0 ½ diam. annuli, fere 39 ½ diam. ☉
Secundus 2 ½ fere 42 ½ diam. ☉
Tertius 4 ½ fere 58 diam. ☉
Quartus 8 ½ fere 134 diam. ☉
Quintus 24 fere 396 diam. ☉

Horum ordini quartum Hugenius in Hollandia, omnium primus detexit A. 1655. reliqua à Cassino Parisijs 1. et 2. an. 1684. 3us an. 1684. 4tus an. 1686. reperit.

ORBITA IOVIS

IOVIS… periodum… absolvit… diametrorum… Solis diametrum… Distantia… Solem fere 1000 diam… Solem fere 1000 diam… Terræ 12 min. 5

SYSTEMA IOVIALE

Circuit. diebus 16 hor. 18 min. 5

Circuit. diebus 7 hor. 4 min. 0

Quatuor IOVIS SATELLITES, qui Tellur nostra nix numeris sunt, ab Iunt a centro Iovis ut infra.

Primus 5 ½ diam ☉ fere 42 diam. ☉
Secundus 8 ½ fere 67 diam. ☉
Tertius 14 ½ fere 107 diam. ☉
Quartus 25 ½ fere 192 diam. ☉

ORBITA MARTIS diluor 1½ circ.

Aphelium ♂

Perihelium ♂

Terra Mercurius Venus Sol Mars Iupiter Saturnus

Mercurius in Sole visus

Mercurius in Sole visus

Memoranda SOLIS ECLIPSIS totalis 22 May 1706 alibus terrarum cum mora trium… ex amplas memorum… conspecta… cuius tractum integrum per universam… Europam atque Asiam, ubi plena… observatio contigit, hoc designatur Orbis; sic mate dies partes ac nobis Horas cum finitra tempore Mensis accommode representante ostendimus.

Typus Orbitæ Terræ, Diametro maximi fulcrum Germanicum, talium, erat diam.

Aphelium ♄

Perihelium ♄

EX HIS CREATOREM.

Diametrorum & Magnitudinum Planetariarum respectu Solis et Terræ PROPORTIONES calculo Arithmetice deductæ

Diametri: Terræ, Solis, Lunæ, Veneris, Mercurii, Martis, Iovis, Saturni, Annuli

Diameter Terræ ad Diameter: Annuli ♄ 2 1 1 1 1 1 1 1 fere; ♄ 2 2 2 2 2 2 2 2 fere; ♄ 33. 9 prox. 25. 7 prox. 20. 5 prox. 222. fere. 42. fere. 5. fere.

Diameter Solis ad Diameter: ♄ 2 2 2 2 2 2 2 2 fere; ♄ 405. 231. 236 9078 diciis 59 2754 20 2445 08 24 4235 57

Hinc Solidit: seu millia… rum Cubicorum ita… prehendatur esse… ☿ 8 9 0 5 6 4 0 0 0 0 ☉ 2 7 6 8 3 2 1 3 6 1 0 0 0 ♀ 3 6 4 5 2 5 2 0 2 8 8 4 0 0 0 ♂ 6 2 5 3 3 0 0 0 0 ♃ 3 5 5 8 3 0 0 0 0 ♄ 1 4 9 3 0 1 4 0 0

Est igitur Tellure nostra major ♄ 33 8 ♃ 10 3 ♂ 2 ½ minor ♀ 2 0 3 9 7 ☿ 0 7 8 ☾ 0 7 ¼

Diam. ☉ est 37 T. mill Germ: ideo Tellure minor ☉ vero quam prox: Distantia med. 30. diam. ☉ sive 51600 mill Ger.

Aphelium ♄

Zonahant

Systema Ptolemæi, exstat sub initium Strabi II.

Systema Tychonis, exstat circa finem Sec.

Sic oculis

SYSTEMA COPERNICI

Sic fulcitur

Eclipsis Lunæ

Terra

Terra

Terra

SYSTEMA MUNDI TYCHONICUM

Secundum celeberrimorum Astronomorum TYCHONIS de BRAHE et Io. BAPTISTÆ RICCIOLI S.I. Hypotheses concinnatum à IOH. GABR. DOPPELMAJERO MATH. PROF. PUB.
operâ IOH. BAPT. HOHANNI Norimbergæ.

MAGNITUDO PLANETARUM SECUNDUM TYCHONEM.

Saturnus
Venus
Terra
SOL
Mercurius
Mars
Iupiter

MAGNITUDO PLANETARUM SECUNDUM RICCIOLUM.

Saturnus
Venus Terra Mars Mercurius
SOL
Iupiter

IOVIUS

ORBITA SATURNI.

Saturni Distantia media secundum Tychonem est 10550 Semidiam. Terræ, sive 951000 earundem, seu 827800 Mill. Germ. secundum Riccioli

MARTIUS

ALMAGESTUM NOVUM

AUGUSTUS

APRILIS

SEPTEMBER.

OCTOBER.

NOVEMBER.

DECEMBER.

FEBRUARIUS.

IANUARIUS.

MARTIUS.

ORBITA IOVIS

Iovis Distantia media secernitur Diametros, qæ est 1990 Semidiam. Terræ, seu 1590 Mill. Germ. secundum Riccioli, seu 1590000 Mill. Germ.

ORBITA MARTIS

Aph ♃

Perih ♃

Diametrorum et Magnitudinum Planetis tam Solis quam Terræ respectu secundum Tychonem.

Diametrorum et Magnitudinum Planetis tam Solis quam Terræ respectu secundum Riccioliu.

Diameter SOLIS ad Diametr.
Saturni ♄ 6
Iovis ♃ 10
Veneris ♀ 86
Terræ ♁ 140
Martis ♂ 1840
Mercurij ☿ 2640
vicibus. Diameter TERRÆ ad Diametri quam proximè ut
Diameter LUNÆ est 499 Mill. Germ. hinc quoque ☾ minor 42 vicibus quam Terra. Distantia media 60 Semid. Terræ, sive 51600 Mill. Germ.
Nunc ponendo Terræ Diam. 1720 Mill. Germ. talium erit Diameter
☉ 8921
♄ 4847
♃ 4128
♀ 938
♂ 728
♁ 645
Hinc Solidit. Dat. bitur Milliar. Germ. cubicorum in
☉ 371 895 178 742
♄ 59 542 766 079
♃ 30 846 178 889
♀ 4 332 600 119
♂ 2 021 053 327
♁ 1 405 474 94

Diameter SOLIS ad Diametr.
Saturni ♄ 15 ad 8
Iovis ♃ 19 ad 2
Veneris ♀ 26 ad 5
Terræ ♁ 49 ad 4
Martis ♂ 180 ad 15
Mercurij ☿ 135 ad 1
quam proximè ut
hisce datis Sol magnitudinis suæ verè apparentis
Diameter LUNÆ est 447 Mill. Germ. adeoque ☾ 55 vicibus minor quam Terra. Distantia media 56½ Semid. Ter. sive 48590 Mill. Germ.
& suppositâ Terræ Diametro 1720 Mill. Ger. talium erit Diam.
☉ 58193
♄ 16512
♃ 15156
♀ 1978
♂ 894
♁ 450
Hinc copulentia Habitur Mill. Ger. cubicorum in
☉ 1 032 251 750 985 63
♄ 2 338 155 448 903
♃ 1 826 380 151 906
♀ 405 370 604 2
♂ 374 270 801
♁ 216 465 24

Major ☉ ♄ ♃ ♀ ♂ ♁ Minor
Proportiones Orbitarum Planetarum secundum Tychonem.
Major ☉ ♄ ♃ ♀ ♂ ♁ Minor
Proportiones Orbitarum Planetarum secundum Riccioli.

SYSTEMA RICCIOLINUM.

Orbita ♄ Saturni
Orbita ♃ Iovis
Orbita ♂ Martis
Orbita ♀ Veneris
Orbita ☿ Mercurii
Orbita ☉ Solis

SYSTEMA ÆGYPTIACUM.

Orbita ♄ Saturni
Orbita ♃ Iovis
Orbita ♂ Martis
Orbita ☿ Mercurii
Orbita ☉ Solis

Planetarum Distantias e Magnitudines etiam hic secundum TYCHONIS & RICCIOLI, inter multos Tychonicos celeberrimi, Hypotheses tum arithmetice quam geometrice tradere visum fuit. Distantiarum e Magnitudinum rationes inter se comparatio, prima fronte prò scientia incerta penitus ac habenda, magnum tamen negotium, satis grandem ejusmodi tribuebat elaborationem. Micrometrorum cæ. quæ Tychone, suo tempore Dissentijs habitarum, non ex minimo hic maximo adhuc dubitatur, magnam inter observationem reciprocè efc; Diversa tamen inter Astronomia aliarum rerum & Phenomenorum Eclipsibus verò, notitiam eà certitudine, qua gaudent ut hæc ea propter quam maximè laudibus tanquam Scientia in plurimis certa, merito ac exornanda.

Exhibemus hic SYSTEMA quad inter Ptol. Ptolemæi & Copernici, Astronomis nostrâ maximè tenet locum, celebre illud Tychonicum, à Tychone Brahæo Nobili Dano inventore suo sic appellatum, de utroq; autem hâ participare, ex ijs hujus Tabulæ inspectione facilè patet. Tycho enim cum Ptolemæis Terram omni motu immunem statuit pro medio Universi, & quam proximè pro centro, ex quo orbes Lunæ et Solis et Sphæræ Fixarum descriptæ sunt concipiendæ, Solem autem cum Copernico circiter eo centro orbitarum, quas quinq; Planetæ primarij ☿ ♀ ♂ ♃ ♄ circa Solem peragunt, in ejus plenè cum Riccioliano convenit. Planetarum per Libros optices spectate adeò exigunt. Ab hoc non multum abludit aliud, nempe Systema Ægyptiacum, per Vitruvium Martianum Capellam Macrobium aliosque excultum, in eo autem tantum à priori differt, quod centrum orbitæ ☉ etiam ad Terræ centrum, contra observationem solem, referat, cum in ejus proximè pro centro orbitarum, quas quinq; Planetæ primarij ☿ ♀ ♂ ♃ ♄ circa Solem peragunt, in ejus plenè cum Riccioliano convenit.

THEORIA PLANETARUM PRIMARIORUM,

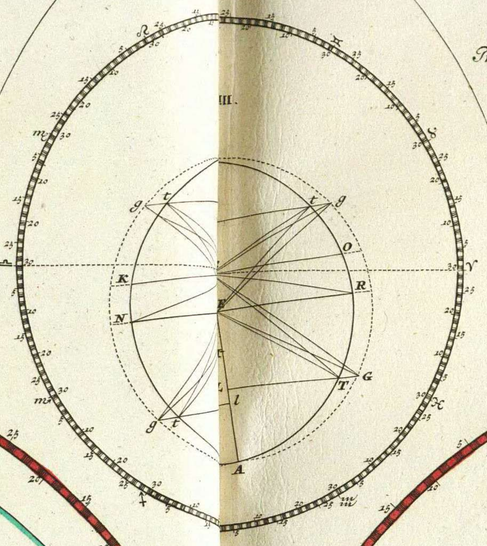
In qua ipsorum motus in Copernicano Systemate tam ex Kepleri et recentiorum Astronomorum ... aliorum, ut, Sethi Wardi, Ismaelis Bullialdi et Nicolai Mercatoris Hypothesibus Ellipticis demonstrantur, exhibente

IOH. GABR. DOPPELMAYERO, Mathem. Prof. Publ. Acad. Cæs. Leopold. Carolinæ, Naturæ Curiosorum, et Acad. Scient. Regiæ Prussiacæ Socio,

Sumptibus IOH. BAPTISTÆ HOMANN ... Cæs. Maj. Geographi etc. Noribergæ. Cum Privilegio Sac. Cæs. Majest.

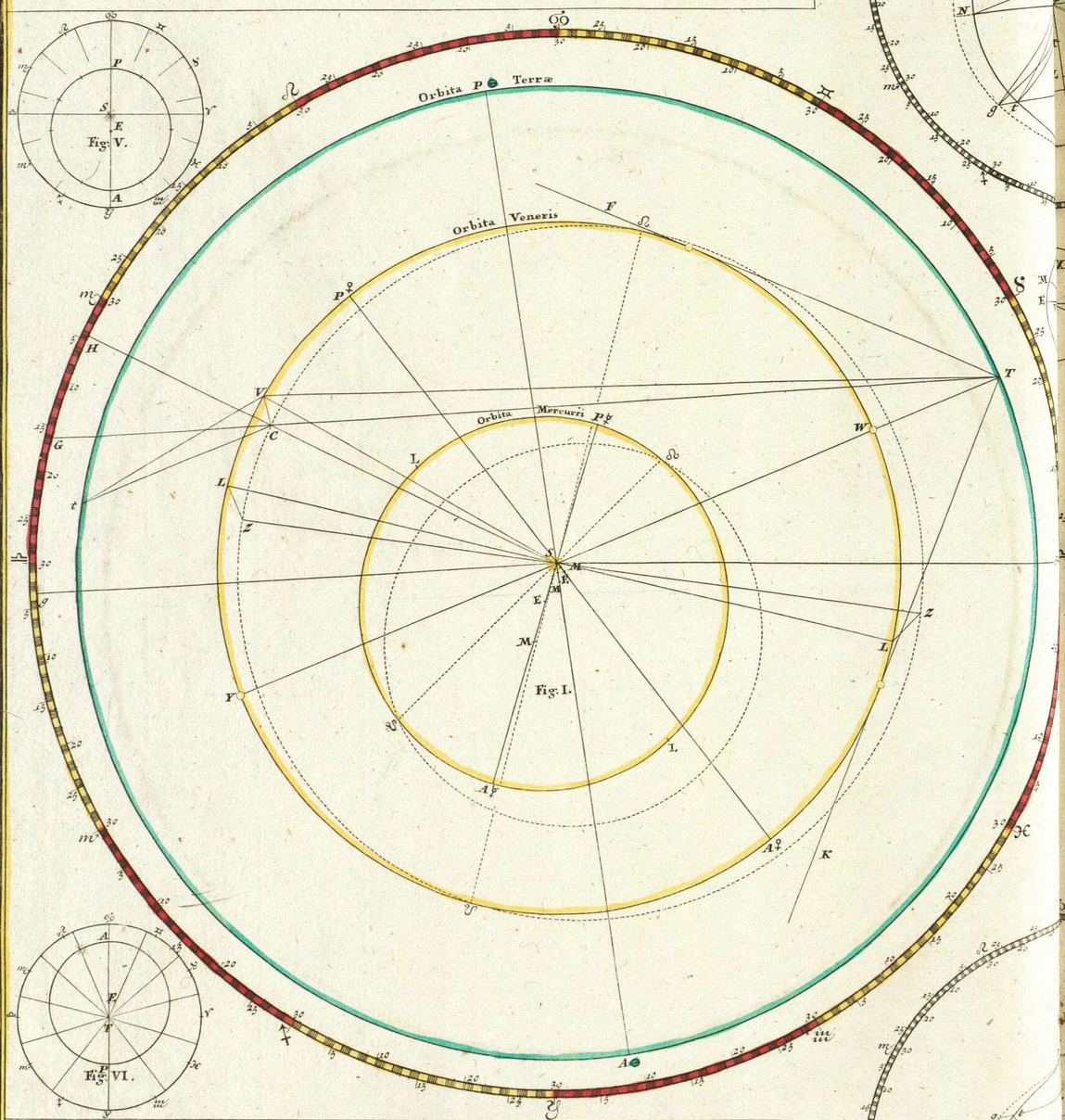
De planetarum primariorum motu in genere, ex Kepleri recentiorumque Astronomorum Hypothesi.

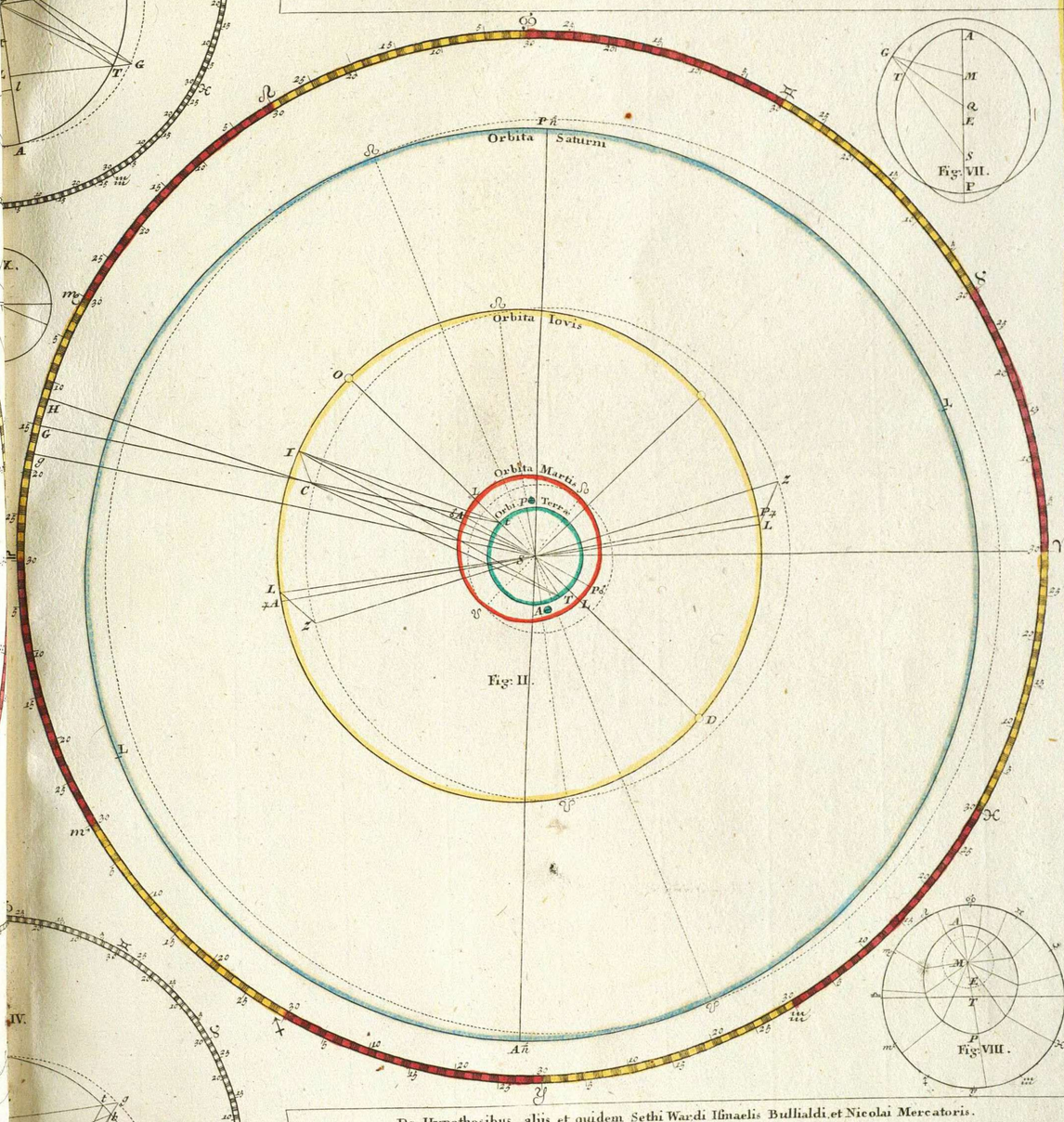
Terra caterique primarij in Orbitis circa solem, quoad situm et magnitudinem, diversis, figuræ Ellip=ticæ, à circulari tamen non multum recedentis, tam ex Kepleri quam aliorum assertionibus per ob=servationes innumeras hactenus firmatis, hac perpetuo moventur lege, ut, radio (Fig: 3) ex S Solis centro et communi omnium foco ad locum Planetæ in T v. g. ducto, quilibet aream A S T, Tempori, quo pla=neta ab ejus Aphelio A ad T movetur, proportionatam, hoc est æqualibus temporibus æquales areas sive portiones ellipticas describat et ut tempus integræ cujusque periodi ad tempus, quo planeta ab Aphelio A ad T v. g. provehitur sic area totius orbitæ ellipticæ ad aream A S T sse habeat. His positis sequitur quod planeta quivis circa Aphelium tardius, circa Perihelium celerius, prout à sole remotior aut illi propior est, et sic motu semper inæquali circa Solem volvatur, hæc inæqualitas planetis propria et vera prima, ad differentiam secundæ, quæ optica et è motu terræ resultans nobis deprehenditur, As=tronomis dicta pro hac indaganda Keplerus circulum cuivis orbitæ circumscripsit, ut designet arcus hujus, ex hibeatque mensuram temporis, quod planeta in illis insumit, quorum subsidio Anomalias horum motuum exhibuit, et quod quærebatur ex voto exsolvit.

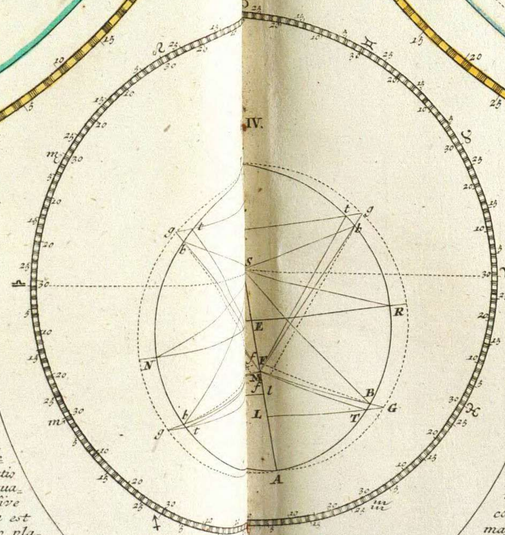


De motu telluris annuo speciatim.

Inter planetarum motus ille Telluris, qui et motus Solis apparentis et omnium primariorum basis est, imprimis eminet, hunc, prout reliquos, omnes ante Keplerum Astronomi exacte circularem et pro=sus æqualem asserebant, et cum terræ corpus, vel, secundum Tychonicos, Sol in circulo cum Eclipti=ca eccentrico feratur, alterutrum in eadem (prout Fig: V et VI indicat) apparentes tantum inæquali motu pro=volvi credebant. Sed Keplerus meliora edoctus ex observationibus Tychonicis cognovit motum istum vere inæqualem. Theoriam hujus ex mente Kepleri et eorum qui vestigia ejus premunt, Fig: III, aliorum vero, qui ex altero orbitæ terræ umbilico motum medium et æqualem statuunt Fig: IV et VII indigitat. In his in A est Aphelium, in P Perihelium, quod ex Tychonis Hypothesi Fig: VIII Apogæum et Perigæum dicitur, circa quos puncta anomalia motus maximè inter se differt, ita ut ad A motus sit tardissimus, ad P vero celerrimus, et il=lic per aliquos dies singulos neguidem 3' minuta excuperet, hic vero 61 minuta conficiat. Ex his tan=dem sua sponte fluit, cur sol ducta per æquinoctiorum puncta et per orbitam telluris linea, in bore alibus Ecliptice signis diutius et quidem per octiduum fere quam in Australibus hærere videatur, quod ex Phænomenis motus hujus præcipuum est.







De punctis, lineis, angulis, areis in Theoria superiore occurrentibus.

In orbita planetæ cujusque ellipticâ (Fig: III) P N A R. sequentia puncta notanda (1) Foci duo, quorum unus in S. in quo centrum Solis, alter in M. (2) E medium inter focos punctum, orbitæ centrum (3) duæ apsides Auges) A summa Apsis s. Aphelium P ima Apsis s. Perihelium. (4) Nodi duo (Fig: I et II) ☊ Nodus boreus ascendens ☋ Nodus australis descendens (5) L L. limites planetarum. Lineas et distantias rectas constituunt (1) A P. axis et diameter Ellipseos major s. Apsidum linea, in qua (2) S E. Eccentricitas (3) S M. Focorum distantia (4) S A. distantia planetæ à Sole maxima (5) S P. distantia illius minima (6) R N. diameter Ellipseos minor (Fig: III) Ke=plere Discentes (7) S N et S R. quarum quælibet lineæ E A vel E P semiaxi majori æqualis) distantia planetæ à Sole media (8) linea per centrum Solis K S O axi majori perpendicularis, Keplero Dichotos (9) G L. Sinus rectus arcus G A (10) T L. ordinatim applicata (11) ☽☿ linea No=dorum (Fig: I et II) (12) V S. I S. distantia planetæ à Sole (13) C S. distantia planetæ à Sole curtata (14) V C (Fig: IX) differentia inter hanc et illam curtatio dicta (15) T V T (Fig: I et II) vera Planetæ à terra distantia (16) T S distantia Terræ à Sole. Angulos et areas sequentia exhibent (1) Anomalia media (Fig: Keplero III) est area A S T, vel æquivalens A S G, aut tempus, quo planeta ar=cum orbitæ suæ v. g. A T describit (2) Anomalia eccentri arcus A G (sive ang A E G) qui curvæ ellipticæ A T respondet (3) Anomalia coæquata, ang: A S T (4) æquatio vel Prosthaphæresis T E S, hujus duæ sunt partes, altera physica, area triangularis E S T (quod triangulum æquatorium dici=tur) vel æquivalens E S G, altera optica, ang: E T S (5) Inclinatio orbitæ ang: L S Z (Fig: I. II) (6) Inclinatio planetæ sive latitudo he=liocentrica, ang: V S C, I S C, (7) Argumentum inclinationis sive lat: helioc: ☊ V. I ☊ (8) Reductio ad Ecliptican, differentia inter an=cum V ☊ I ☊ et C ☊ I (9) Angulus commutationis s. ang: ad Solem, ang: T S C (10) parallaxis orbis sive æquatio centri, ang: T C S (11) elongatio planetæ à Sole sive ang: ad Terram, ang: S T C quæ in inferioribus planetis interdum maxima et ob eccentricitatem orbitarum inæqua=lis, prout ang: S T E et S T K subindicat, nulla verò cum planeta est in conjunctione cum Sole, quæ in inferioribus duplex, alia inferior sive perigæa ad W, alia superior sive apogæa in Y. Altæ elongationes planetæ à Sole notabiliores in superioribus contingunt cum planeta est cum Terra in quadratura, ut ang: T S L, in Fig II, alias si in oppositione ad D nulla in conjunctione ad O. Tandem notetur Latitudo pla=netæ geocentrica C ☊ V. C T V et C ☊ I C T I, quarum illa major, hæc minor quam heliocentrica. Longitudo Heliocentrica H S V, geocentrica ad G, sive potius ad parallelam g ♑ in Ecliptica à principio ♈ numerata in qualibet harum Figurarum.

De Hypothesibus aliis et quidem Sethi Wardi Ismaelis Bullialdi et Nicolai Mercatoris.

Præter Theoriam Keplerianam complures Hypotheses quoque alias ellipticas excoluerunt primò vero Sethus Wardus et Comes Paganus, hoc fundamento nisi, nempe unumquemque planetam in peripheria orbitæ suæ ellipticæ sic ferri, ut ex altero foco in M (Fig: IV) spectatus temporibus æqualibus æquales quoque illic arcus v. g. ducto radio ex hoc centro ad planetæ locum describat. Hinc angulum A M T. Anomaliam mediam absolvat. Hunc angulum Bullialdus Observati=onibus magis respondentem, correctioremque postmodum tradidit ducendo axi majori perpendicularem (quæ huic in I. cir=culoque per diametrum A P. descripto in G occurrat ut et lineam M G, hinc enata (1) Anomalia correcta s. Anomalia media vera, sectio=ne per aliquos dies singulos neguidem 3' minuta excuperet, hic vero 61 minuta conficiat. Ex his tan=dem sua sponte fluit, cur sol ducta per æquinoctiorum puncta et per orbitam telluris linea, in bore alibus Ecliptice signis diutius et quidem per octiduum fere quam in Australibus hærere videatur, quod ex Phænomenis motus hujus præcipuum est.

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*Anomaliam mediam A M T et Anomaliam veram A M G Streetio variatio dictus (3) Ang: M S B Anomalia Coæquata (4) Ang: B, locus planetæ correctus in sua orbita (5) B S. distantia planetæ à Sole correcta (4) Ang: T M G. differentia inter ang: A M G (2) B, locus planetæ correctus in sua orbita (5) B S. distantia planetæ à Sole correcta (4) Ang: T M G. differentia inter Anomaliam mediam A M T et Anomaliam veram A M G Streetio variatio dictus (3) Ang: M S B Anomalia Coæquata (4) Ang:

Celidographia I: Descriptio macularum in Venere à Fr. Blanchino exh.

I. Mare I. regium Johannis V
II. Mare II. Infantis Henrici
III. Mare III. Reg. Emanuelis
IV. Mare IV. Pr. Constantini
V. Mare V. Columbi
VI. Mare VI. Vespucii
VII. Mare VII. Galilæi
VIII. M. boreum I. Maræ Pol.
IX. M. austr. I. Magel. lanicum

PHÆNOMENA IN PLANETIS PRIMARIIS

Quæ facies diversas, ex illorum phasibus, m[aculis] et fasciis seu zonis ortas, sistunt, exhibita

a IOH. GABR. DOPPELMAIERO, *Acad. Imp. Leopoldino-Carol. Nov[orum] Societatum[que] Regiarum Britannicæ et Borussicæ Sodali et Math. PP.*

Sumptibus Hæredum H[omannorum]. Norimbergæ.

Maculæ in Venere

Ex Observ. Cassini 1686
Ex Observ. Cassini 1686
Ex Observat. Cassini 1686
Ex Observationibus Cassini et Hugenii 1672
VIII
III II I
IX
Ex Observ. Hevelianis 1672
VIII
VII VI V IV
IX

De Phasibus Planetarum inferiorum et maculis in Venere etc.

Planetæ inferiores, mutuato à Sole lumine splendentes, diversas nobis è terra spectandas Phases præbent, deprehenduntur autem illi, cum ad **A** *eta in Conjunctione cum Sole inferiorem locum obtinent, (vid Fig. 2) ex Terra ad* **T***, lumine penitus destituti, ad* **B** *et* **M***, C et L ut et ad b et m cet. l, corniculati et falcati, ad* **D** *et* **K** *dimidiati, ad* **E** *et* **I** *et* **H***, e et i et h, gibbosi, tandem ad* **G** *et g orbe pleno fulgentes. Venus porro maculas varias visui subjicit, quod nostro ævo Observationes virorum celeberr. JJ. D. Cassini et Franc. Blanchini optimæ notæ Tubis insitutæ satis superq[ue] comprobatum dedere. Blanchinus etiam novam harum macularum descriptionem sive Celidographiam, et quidem primo omnium, edidit. Deniq[ue] in eodem Schematismo primo, ex Hypothesi terræ motæ, dum hæc, axe ejus ad Eclipticæ planum inclinato, motu diurno circa centrum et per orbitam suam intra spatium annuum volvitur, dierum et noctium varietates, temperiem, tempestatum annuarias vicissitudines, harumq[ue] in diversis locis differentias, facili negotio demonstrantur, de quibus alibi dicendi locus erit.*

Fig. 1.

MERCVRII ORBITA

VENERIS ORBITA

TELLURIS ORBITA

Zonæ & maculæ varii generis in Marte.

Ex Observ. Hugenii Anno 1672
Ex Observ. Cassini Anno 1672
Ex Observ. Cassini Anno 1672
Ex Observ. Rob. Hookii Anno 1666
Ex Observ. Maraldi Anno 1704
Ex Observ. Maraldi eodem anno
Ex Observ. Maraldi eodem anno
Ex Observationibus Maraldi Anno 1704

De phasibus, maculis et fasciis Planetarum superiorum.

Planetæ superiores easdem, prout inferiores, Observatori extra orbitam Saturni constituto exhibent Phases, (vid Fig. 2.) sed idem dum in Sole positus fuerit, nullas prorsus, cum omnes planetæ ex illo semper orbe pleno videantur; visu percipiet, imo nec ex Terra in Jove et Saturno aliquam luminis phasin, ob permagnam horum à sole distantiam respectu Terræ à Sole, nobiscum observabit, at vero in Marte, multo viciniore, nonnullas Phases, et quidem in conjunctione et oppositione, eundem orbe pleno, circa Quadraturas, lumine ferè dimidiato, et postmodum gibboso splendentem, nunquam vero rel falcatum, vel corniculatum contemplari datum erit. Porro iidem ob insignem macularum et fasciarum numerum, quem celeberrimi Hugenii, Cassini, Hookii, et Maraldi observationes suppeditarunt, plura nobis, ad latera tabulæ notanda, exhibent. Maxime vero memoranda præbet Saturnus, qui annulo cinctus, facies diversas, temporibus Gallilæi, Scheineri, Fontanæ, etc. imperfectas, nostro vero et Hugenii tempore, perquam exactas præsentioribus Tubis instructis conficiendas dedit, addendo ipsis insuper observationes Cel. Cassini et Hudleji, secundum quas annulum Saturni duplicem deprehenderunt.

Anno

Falciæ et maculæ in Jove.

Ex Observ. Hugenii Anno 1684
Ex Obs. Hugenii Anno 1684
Ex Obs. Cassini Anno 1684
Ex Obs. Rob. Hooke Anno 1664
Ex Observ. Cassini Anno 1691
Ex Observat. Cassini Anno 1691
Ex Obs. Cassini Anno 1691
Ex eodem eodem anno
Ex Obs. Cassini eodem anno
Ex Observ. Cassini eodem anno
Ex Observationibus eodem anno 1691

Anno 12 35'

B

Anno 12 51'

D

ORBITA IOVIS

Phases variæ et Zonæ in Saturno

Ex Observ. Scheineri, Fontanæ etc.
Ex eisdem Observationibus
Ex eisdem Observationibus
Ex Hugenio
Ex Observ. Cassini Anno 1684
Ex Observ. Cassini Anno 1691
Ex Observat. Hadleji Anno 1725
Ex Observ. alior. Anglor.

Anno 29 44'

C

ORBITA SATURNI

PHASES E TERRA SPECTANDÆ

PHÆNOMENA

circa quantitatem dierum artificialium cum aliis tam Veterum quam recentiorum perpetuo mutabilem, ex Hypothesi copernicana deducta, et Philosophorum, Systematibus mundi notabilioribus exhibita.

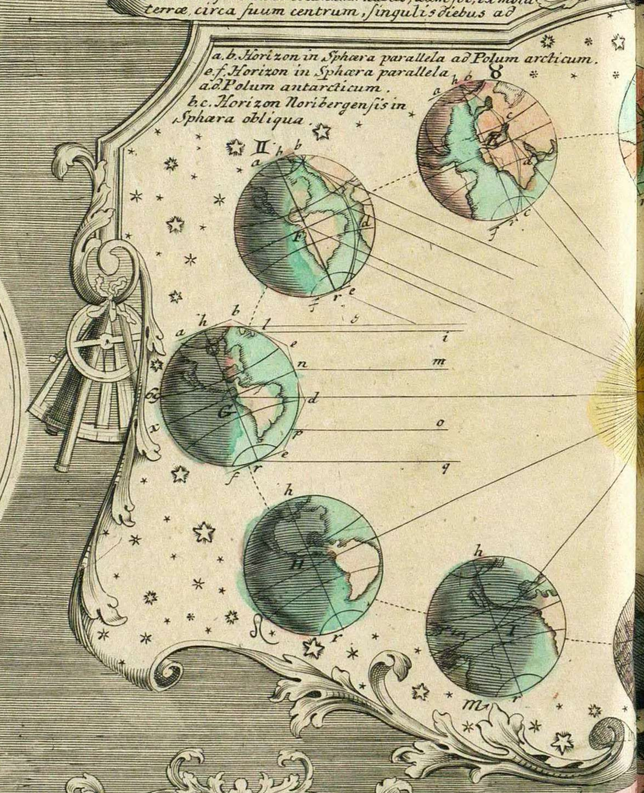
a IOH. GAB. DOPPELMAIERO Acad. Cæs. Leopoldino-Carol. Societatumque Regiarum Britannicæ et Borussicæ Sodali; et Math. Prof. Publ. Sumtibus Heredum [illegible] Norimbergæ cum P. S. C. M.

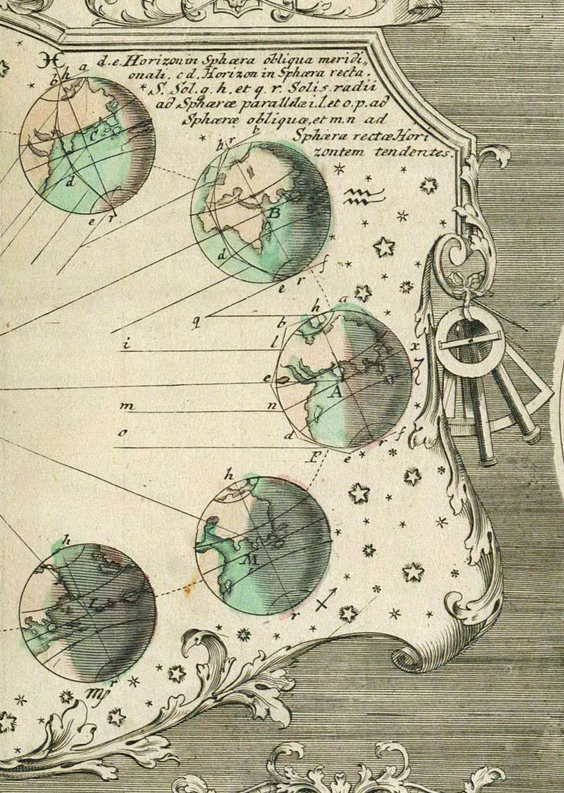
De dierum artificialium quantitate mutabili.

Cum Terra, secundum Copernici Hypothesin, in Ecliptica planorum temporis spatium, ut et singulis diebus, circa axem suum qui à plani ecliptici polis in distantia 23½ graduum versus eadem ta perpetuo detinuntur) ab occidente in orientem moveatur; hi sectiones ti loco positis, primo dierum artificialium longitudinem variatio noxiam sequenti modo deduximus: Si Terra ad A. C vid. Fig. tio æstivo, et sub Meridiano aliquo, Ex. gr. noribergensi h.n.r. et ad tio brumali, sub eodemque Meridiano debito modo a quo ad situm ta concipitur, altitudo Solis Meridiana super Horizontem, hic super to utrimque Solis radio i.l. cum radiis ex illius Centro ad Centrum ductis S.A. et S.G. (ob magnam Solis à Terra distantiam) parallelis, in Terræ ad A. sub angulo i.l.e. maxima, in altero vero ad G. sub angulo i.l.e. apparebit, quæ altitudines ab Aper B. C. D. E. F. usque ad G. minores, per H. I. K. L. M. usque ad A. majores evadunt, ex qua altitudinum differ circulorum diurnorum arcus supra Horizontem nunc majores, minores, oriuntur; hinc et harum longitudines dierum omnino mutabiles esse necesse est. Porro et dies solares respectu ad dati alicujus loci Meridianum, habito, dum sol, ex motu terræ circa suum centrum, singulis diebus ad

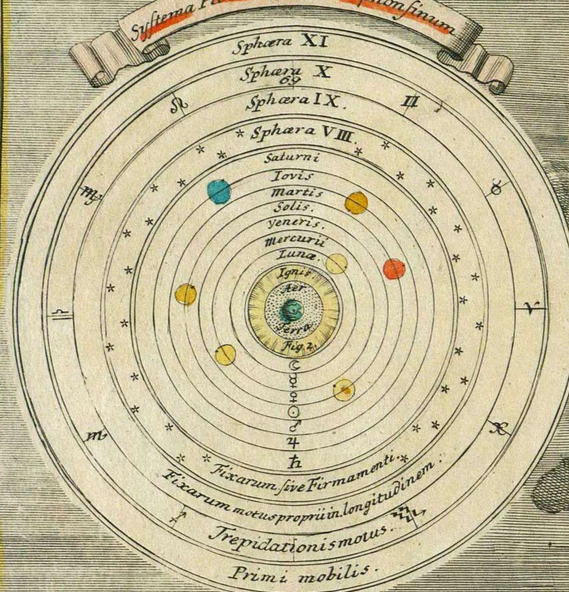
De variarum quantitate mutabili.

um pertingit, inter se inæquales sunt; hæc inæqualitas duplex est, pri a. oritur è motu terræ alio, qui interdum celerior, interdum remis or quam motus ejus medius est; altera dependet ab obliquo ecliptica situ, re pectu Æquatoris, temporis mensuram exhibentis, ex quo positu partes ecliptica uales in Æquatore inæquales conficiunt, quibus temporis æquatio initur. enique in eadem figura facile perspicimus cur per singula annorum dimidia m spatia aliud cœli hemisphærium stellatum nobis appareat, hoc Phæno gnon sequenti modo deducitur, cum ad A. ex Terra Sol S. ad Ecliptica m re tur, hic in Cancri principio locum occupabit, dein vero Terra in B. C. D. E. cometa et Meridiano, Ex. gr. noribergensi h.n.r. ad Solem directo, idem mun e plagas versus, H. I. K. L. M, in sequentibus Ecliptica signis; tandem ax bit, quibus perpensis, Spectator ex Terræ Hemisphærio h.xr. ad A. umbræ cturnæ immerso alias stellas quam ad G. ex Hemisphærio Terræ umbroso h.x.r. videbit; unde denique variationem Hemisphæri orum cœlestium oriri necesse est.

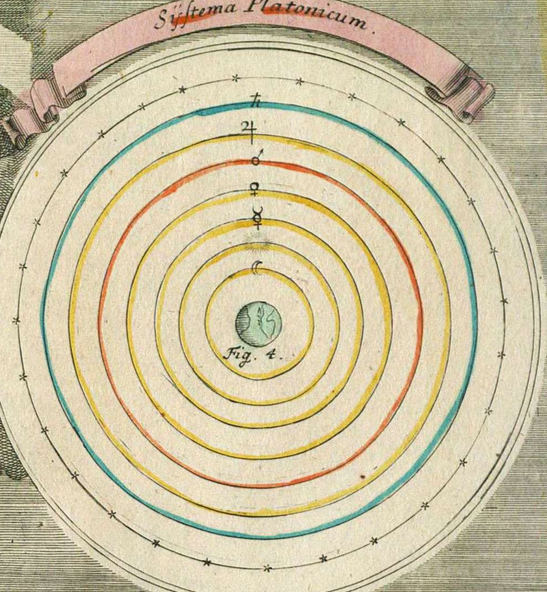




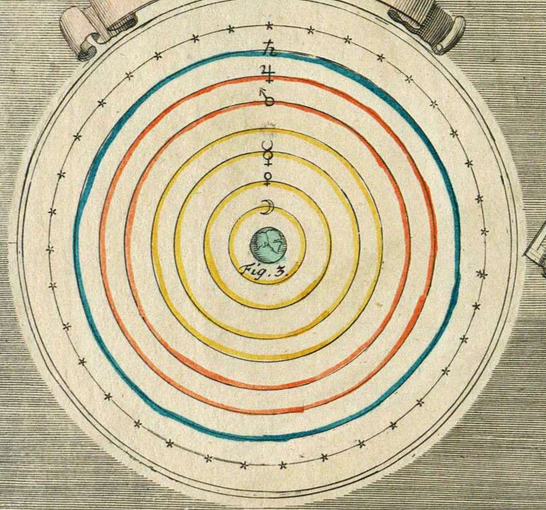
Systema Ptolemaicum et Alphonsinum.



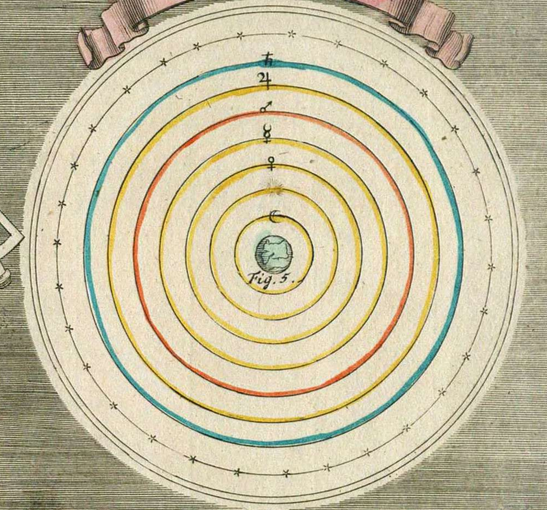
Systema Platonicum.



Systema Plutarchianum.



Systema Porphyrianum.



De nonnullis veterum Philosophorum mundi Systematibus.

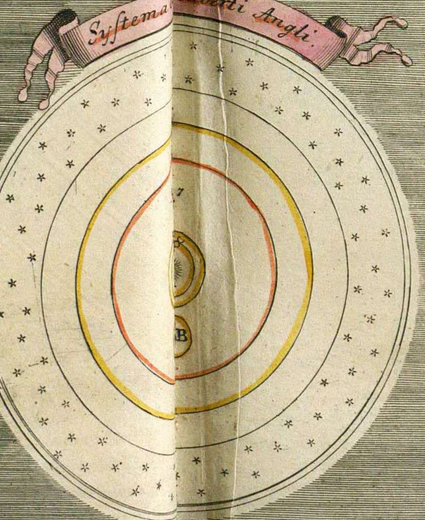
Inter mundi Systemata ab antiquis Philosophis tradita præcipue illud quod a Ptolemæo, insigni ejusdem cultore, ptolemaicum dictum, per aliquot millia annorum viguit; in hoc terra in medio universi immobilis supponitur, quam aer et ignis, ut et Sphæra Lunæ proximè ambit, et porro excipit Sphæra Mercurii, Veneris, Solis, Martis, Jovis et Saturni; harum quævis, præter Solis Sphæram, circulo deferente, sive epicyclo, pro exhibendis planetarum motibus irregularibus gaudet. Huic Systemati seculo post natum Christum, XIII. Alphonsi Hispaniæ Regis sectatores, duas novas Sphæras, unam, pro fixarum motu proprio in longitudinem, alteram pro motu trepidationis salvando, addiderunt, quas tandem Sphæra primi mobilis recondit (fig. 2.) hoc tamen nostris temporibus, ob varios errores, ab Astronomis improbatum et planè rejectum est.

Systemati ptolemaico similia admodum dantur alia veterum, nempe Systema plutarchianum (fig. 3.) platonicum (fig. 4.) et porphyrianum (fig. 5.) quæ, habito respectu ad situm Sphærarum pro Sole, Venere, Mercurio tantum et inter se, et a ptolemaico differunt, prout ex inspectione figurarum facilè patebit.

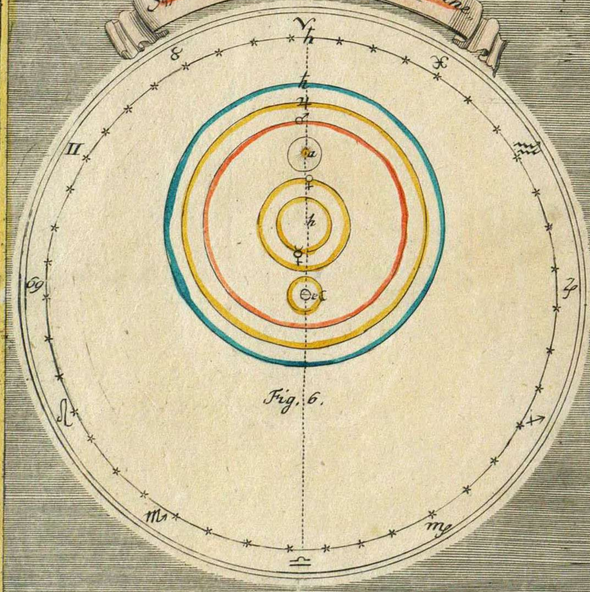
De aliis recentiorum Philosophorum Systematibus mundi.

Nonnulli nostri ævi Philosophi alia quæ, que Systemata comenti sunt, è quibus tria, quæ maxime innotuerunt, in sequentibus exhibentur. Primum est Guil. Gilberti, Anglii, Auctor in hoc ad A. Solem in universi medio immobilem, eundemque pro centro orbitarum, quas planetæ minores dicti, describunt, statuit; in alio vero loco centrum orbitæ lunaris et Terræ ad B (vide fig. 7.) circa axem mobilis et insignis magnetica præditæ ponit, ex qua motu, quodum nutatoria deducta, phænomena motuum planeticorum salvare conatus est. Secundum est Jac. Coccæi, Belgæ, qui in recta centro nempe a. h. e. supponit, circa quod ad quandam, circa secundum, planetæ minores in suis orbitis et circa tertium, fixæ et Luna, hoc est circa terram, tanquam centrum, per quam cum binationem ille apparentias motuum in planetis demonstrare nisus est. Tertium est Sebastiani Clerici, Galli, hic Auctor pro sua stabilitate Systematis, ut ternit Terram B (vide fig. 8.) in orbita sua, cujus et reliquarum orbitarum centrum esse in A, ea Lunam circa Terram, et Solem circa B in circello intra dimidium arcus spatium, quam proxime moveri ita ut hoc motu eccentricitatibus epicyclis ex ipsius mente carere possimus, quæ tamen adhuc examinanda sunt.

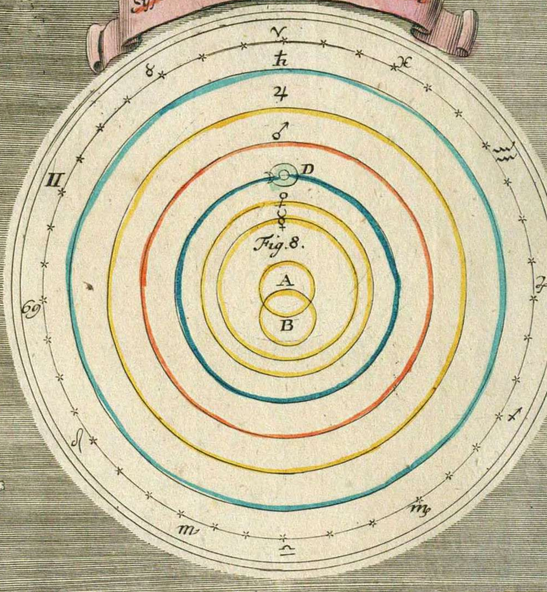
Systema Gilberti Angli.



Systema Jacobi Coccæi Hippothesin.



Systema Sebastiani Clerici Hypothesin.



PHÆNOMENA M… IRREGVLARIVM
quos Planetæ inferiores VENVS … RCVRIVS ad annum Salutis MDCCX
Directionibus, Stationibus et Retrogradationibus suis è TERRA spectandos pr… mplo singulorum Periodi pro Hypotheseos Copernic, firmamento Geometricè demonstrata
À IOH. GABRIELE DOPPELMAJERO MATHEM. …BL. operâ IOH. BAPTISTÆ HOMANNI NORIBERGÆ.

Fig. I.

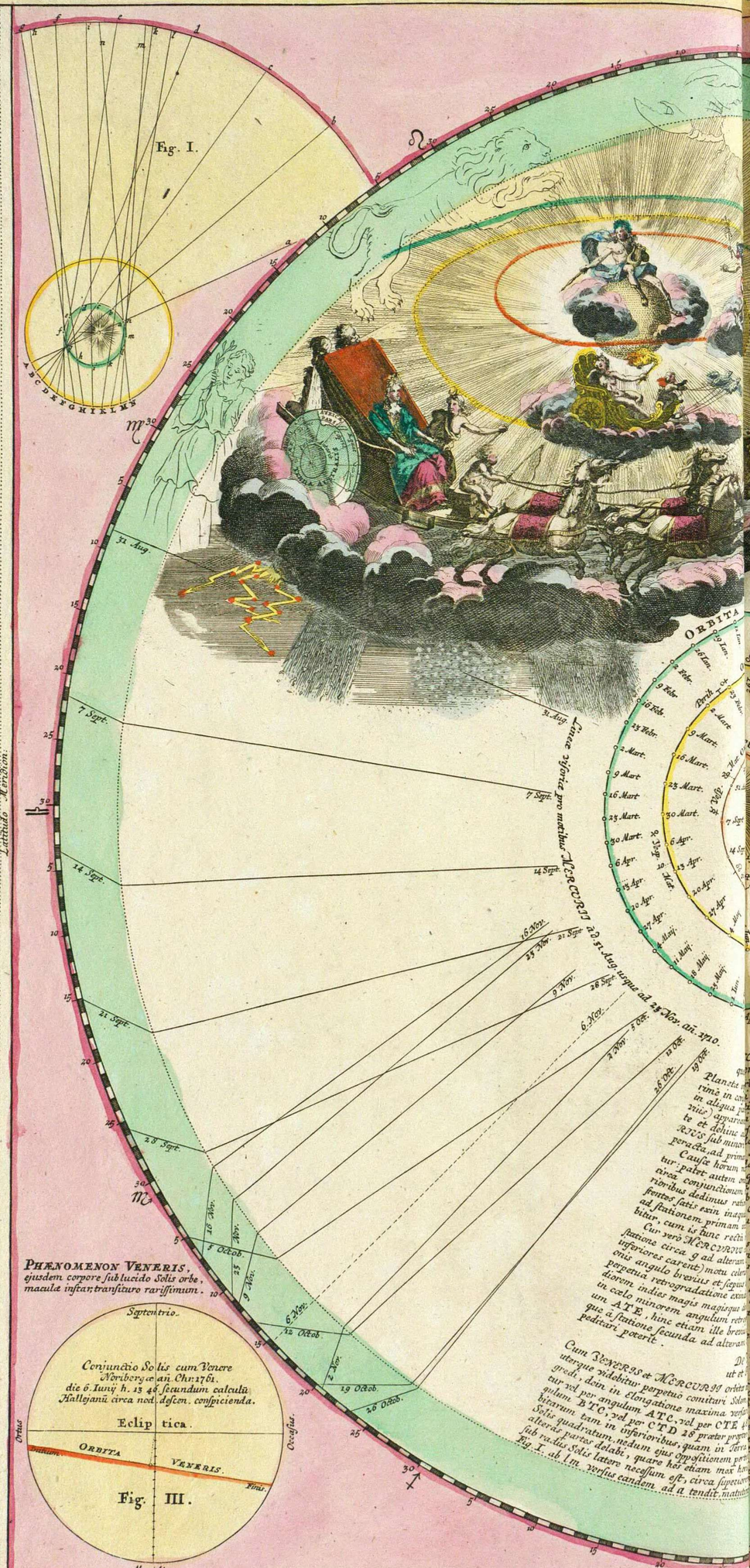
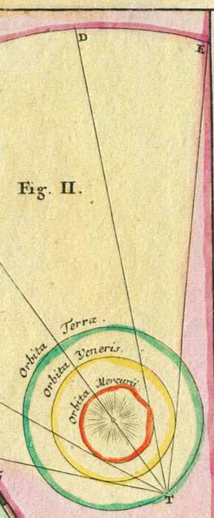


Fig. II.



Motus MERCURII intra periodum suam post meditatem anī 1710. è Terra irregularis secundum signorum consequentia observandus.

Latitudo Septentrionalis.

Latitudo Meridionalis.

Motus VENERIS per integram suam revolutionem à principio anī 1710 ad medium usque Augusti è Terra inæqualis secundum Ecliptice ductum spectandus.

Latitudo Septentrionalis.

Latitudo Meridionalis.

PHÆNOMENON VENERIS, ejusdem corpore sub lucido Solis orbe, maculæ instar, transituro rarissimum.

Fig. III.

Rarum MERCURII in Solis disco ab observatoribus extra Europam spectandi Phænomenon.

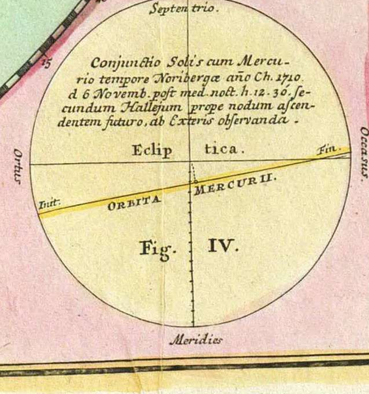


Fig. IV.

…OMENIS et CAUSIS MOTUUM COELESTIUM.

…riores à Terra perquam irregulares spectandos exhibent.

…bitæ parte à nobis remotissima cum Sole juncti, circa eundem celeri… , dein magis magisque ad Solem maximam per partem accedunt, dein circa eundem celeri… ionem à Sole maximam per brevi tempus demorantur, cornuntur, ut tandem … porro, motu suo ad alteram usque cum Sole conjunctionem accelerato, … ius stationem pentibus descendunt, et quidem VENERIS perpetuo celeriores in Orbe suo … o brevius et sæpius quam Copernicana, apud Fig. I. ab 1 versus b c d e et TERRA ab A … rium facile ex Hypothesi Copernicana, apud Fig. I. ab 1 versus b c d e et TERRA ab A … quod inferiorum ulterior, dum hic in Fig. I. ab occasu in ortum movetur, ad Solem … IE ijsdem temporum spatijs ab occasu in ortum magis magisque in obliquum pellitur, … b angulos arcubus TERRA cum inferioribus parallelis, ut hinc manifestum, quod … c, cg à g circa, a celerrime, dein indies tardius, quo magis ad Solem accedit, … ar necessum sit, in cujus stationis meta inferior æquales cum Sole tandem … versus TERRAM tendat. Hinc VENERIS celerior illius motus pro ratione … se stationarius quam VENUS, celerior illius motus pro ratione … i, nempe ad punctum quoddam intra arcum ik inferioribus in eadem … rdiori, sed semper retrogrado, adjacendum ferantur, ik intermedium, … causa ex arcuum hi, ik, kl, diversis motus proportionibus ex … quod tunc TERRA cum inferioribus in antecedentia vergente. … quare visionum linea in antecedentia vergente. Inferioris ex … empe BTD exhibeat, ob minorem orbitam, et majorem à nobis … tempus, et sæpius ob motum celeriorem deprehendatur, ista … m motus iterum celerior deprehendatur, ista angulorum … e MERCURIJ APPARITIONIBUS MATUTINIS & VESPERTINIS, … rarijs suo nempe corpore, maculæ instar, sub Sole nonnunquam conspicuo. … RIJS curriculum sint abditæ, hinc ex iis iterum emergit et circa … orum, nunc ad Occasum à Sole di… pior fictus circa conjunctionem cum Sole degreditur, pelinndum Solis radijs pre… VENERE (vide Fig. II.) mensura… tandem autem ex iis emergendo ad elongationem maximam iterum … dium, in MERCURIO vel per an… ro Soli indies ex iis emergendo ad elongationem usque … elongationes enim hæ utrinque ob… MERCURIUM sub Sole in typo exhibitum, cum eodem … tem semper sunt inæquales, nec ad… tempore Noribergæ, anno 1710. d 7 Novemb. secundum calculum … b) denique versus Solem redeundo ad… meticæ observatoribus, nec vero nobis Europæis apta in umbra … mox vespertinis apparere, mox prorsus… moram, existentibus sub Sole ad Notum ascendente, conspicuum … junctionem dum planeta inferior in… NEREM, quoque sub Sole in Nasi ascendentis junctura ad annum 1761 … dis radius se condit post hanc vespertinis … post subortum inventurum. Vide specimen in Fig. III. tradituc temp. sic Veneris …

EPHEMERIDES MOTUU

In quibus ſecundum Hypotheſin Copernicanam omnia Motuum Planetariorum irregularium Phœnomena h.e

à IOH. GABR. DOPPELMAJERO MATH.

OELESTIUM GEOMETRICÆ

Stationes et Retrogradationes præcipue ad añ. Chr. 1708. et 1709. ut et eorum cauſæ curioſe ad oculum demonſtrãtur

operâ IOH. BAPT. HOMANNI NORIMBERGÆ.

Motus SATURNI *á principio anni 1708 ad 17 Junij anni ſequentis è Terra irregularis obſervandus.*

Latitudo Meridionalis.

Continuatio motus SATURNI *à die 17. Jun. 1709. ad finem usq; ejusdem anni.*

Latitudo Meridionalis

De Planetis ſuperioribus.

Novus Spectator benevole, hic conſpiciendas damus motuum cæleſtium Ephemerides geometricè conſtructas, in quibus ſuperiorum Planetarum, ut et Terræ loca in ſuis orbibus vera, ſingulis menſium ſpatijs ad annum Chriſti 1708 et 1709 exhibemus, hinc etiam pro horum Phœnomenis motus ut et Cauſis genuinis in Hypotheſi ſeu Copernicanæ emolumentum demonſtrandis, loca ſitimus Geocentrica, hoc eſt, è Terræ centro in Ecliptica viſa, prolongando ſcilicet retrò menſe lineas è Planetis ad Eclipticam parallelas (cum nempe orbita Terræ adillam Solis centrum ad Eclipticam, quam actu ipſo habet, puncta, prout inferius hic non habeat rationem, quam actu ipſo habet, puncta, prout inferius ex ſequentibus tantum parte diſtantiæ Solis à Sirio, inter fixas proxi-mas tandem, ſcilicet ſolem celeberrimum Hugenium, facile conjicere poſſumus) et hæc tandem, ſcilicet lineæ reflexæ, loca è Terra in Ecliptica indigi-tabunt viſa. Quæ etiam tam ſecundum longitudinem quam la-titudinem in figuris ad latera extremis ſpectanda tradimus.

Fig. I.

Fig. III.

Motus VENERIS *circa Solem ad ann. Chr. 1708 et 1709.*

Venus Occidentalis. *Latitudo Septentrionalis.* *Venus Occidentalis.* *Latitudo Meridionalis.*

De Planetis inferioribus.

*Cum ob ſpatij angustiam Planetarum inferiorum loca in ſuis orbitis prout ſuperiorum hic exhibere non fuerit datum, ſola tantum horum Phœnomena breviter enarrare libet. Primo, quod ij ſola circa conjunctionem Solem ante et poſt ſequantur, ſed motu magis magisq; decrescente apparent. Interim tamen ſtationem etiam directa. S

MOTUS IN C SPIRALES

Quos Planetæ inferiores VENUS et MERCURIUS secundum Tychonico thesin exhibent, pro exemplo ad annum Christi præcipue 1712 et 1713.

Geometricè descripti a IOH. GABRIELE DOPPELMAI M. PROF. PUBL. operâ IOH. BAPTISTÆ HOMANNI

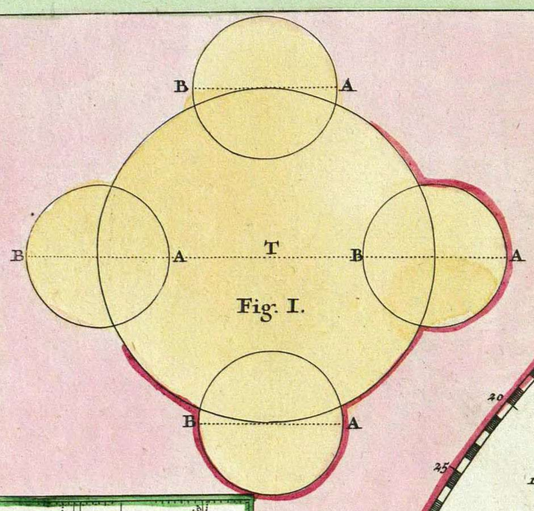


Fig. I.

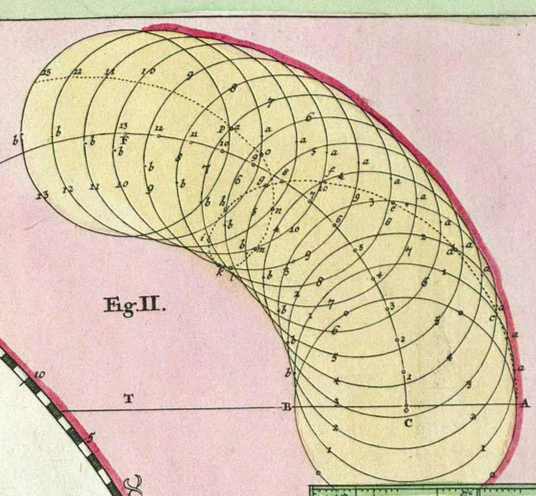
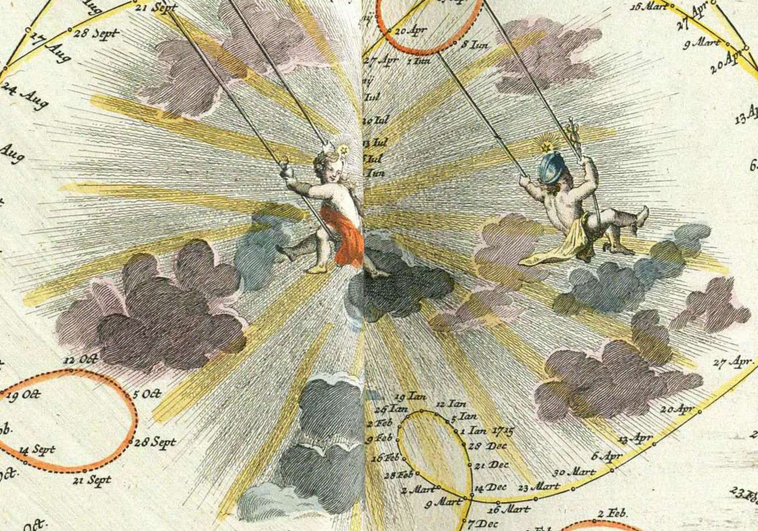


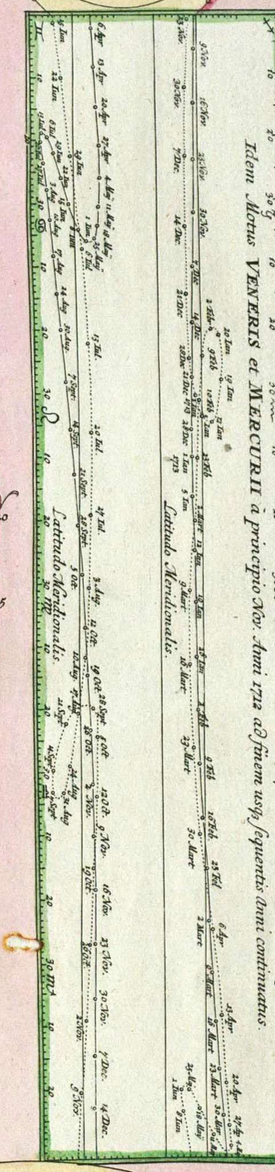
Fig. II.

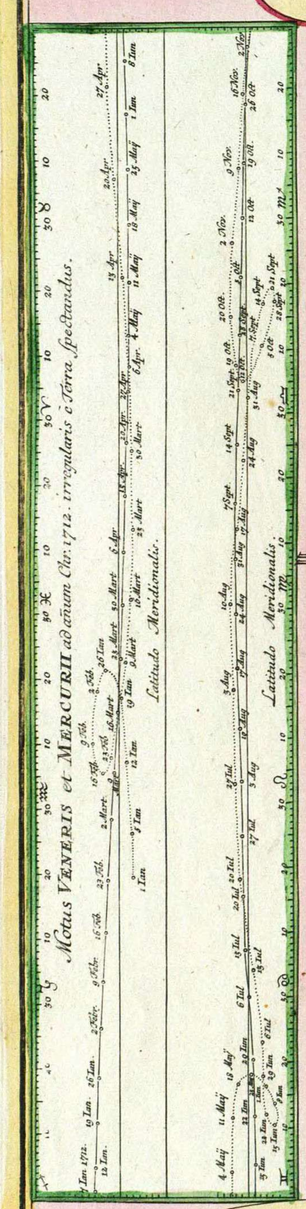
ORBITA MERCURII

MOTUS MERCURII

MOTUS VEN







Inferiorum Planetarum Orbitæ eodē modo, ut Superiorum cum Sole spatio circumgyrantur annuo, lineis suis Apsidum AB per Figuram I. sensibiliter παραλλήλως q.q. permanentibus, prout Tychonicorum fert opinio, hinc etiam illi Planetæ, dum nihil turbati luxatura suarum orbitarum intra has periodum suam nihilominus perficiunt, curvas in coelo describent lineas, quales hic pro MERCURIO punctulis notatas, ad annum Christi præcipuè 1712. et 1713. exempli loco Curiosis geometricè definitas exhibemus, quo iterum perfectio et compendium Hypotheseos Copernicanæ præ Tychonica, et quidem hic tantomagis quam in Superioribus indè eluceat, nam ipsa linearum seu potius semitarum Planetariarum maior inter se confusio quam apud Superiores majorem quoq; unius Systematis præ alio involvit imperfectionem.

Quòd motus Planetarum inf. secundum Tychonicos sint quoq; spirales, facilè ex Fig. II. demonstratur. ponatur autem pro orbita Solis portio circuli EFC esse huius quadrans FC (hic exempli loco pro Mercurio) divisus in 13 partes æquales 1.2.3.4. etc. quas quàproximè centrum huius orbitæ circa Sole intra 13. Septimanas seu quadr. ann, Mercurio simul periodum suam absolvente, percurret, nunc si hunc statuamus ad A in linea Apsidum eam cum Sole junctum orbita ejus in 0.0.0. existet, jam verò si centrū dictæ orbitæ intra unam Septim. ab 0. vel C ad 1. et Mercurius simul ab A per unā partē decimā tertiā suæ periodi moveātur, Orbita in 1. 1. Mercurius autē in c per spatium A c interim latus persultabunt, atsi tandē illius centrum ab 1 ad 2. à 2 ad 3 etc. et Mercurius simul per tāta iterum spatia, quantū erat ante dictum, promoveātur, Orbitæ in 2.2.2. 333 etc. reperientur, loca verò huius in d. e. f. per spatia c d, d e, e f, prorsoluti serpēditabunt genesin quæsitæ lineæ curvæ.

MOTVS PLANET[ARUM] SVPERIORVM

qui secundum TYCHONIS Hypothesin singulis suis periodis per lineas s[pirales] tingunt, exempli loco in primo Seculi XVIII triente geometricè exhibiti

à IOH. GABR. DOPPELMAJERO MATHEM[ATICO] operâ IOH. BAPT. HOMANNI NORIBERGÆ.

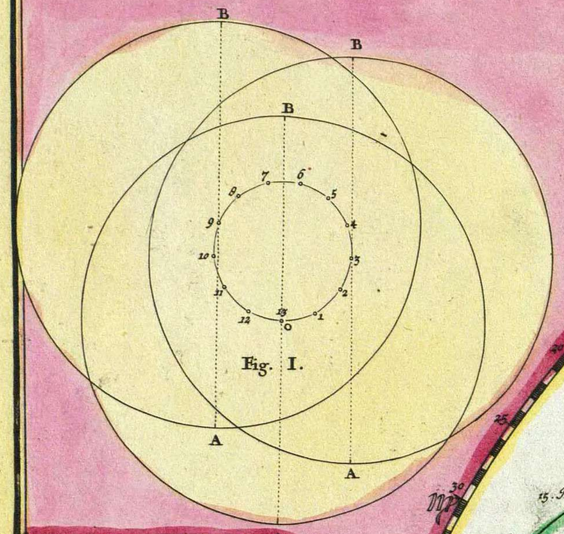


Fig. I.

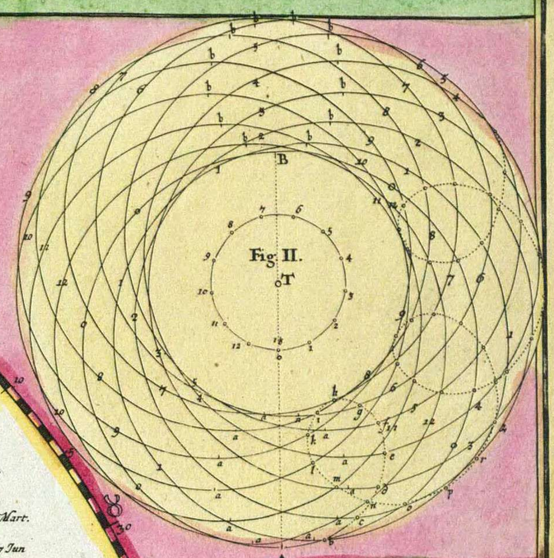


Fig. II.

Periodus ex Tychonis mente spiralis, quam [Saturnus] intra annos 30. absolvit, per Ephemerides descripta.

Motus periodicus, quem 12 annorum spatio definit, secundum Tychonis Hypoth. demonstratus.

Resolutio, quam interdum perficit, ad eadem Hypo. exhibita.

1 Jan. 1712.
1713.
1714.
1715.
1716.
1717.
1718.
1719.
1720
1721
1722
1723.
1724.
1725.
1726.
1727
1728.
1729.
1730
1701
1702.
1703.
1704.
1705.
1706.
1707.
1708.
1709.
1710
1711.

Motus SATURNI ad annum Christi 1712 et 1713 e Terra apparens inæqualis.

Latitudo Meridionalis.

Motus IOVIS inæqualitatem suam anni Christi 1712 et 1713

Latitudo Meridionalis.

Motus MARTIS ani 1712 prout e Terra inæqualis spectatur.

Latitudo Meridionalis.

Idem MARTIS motus per annum sequentem nempe 1713 continuatus.

Latitudo Meridionalis.

Sistimus hic oculis Cultorum Astronomiæ periodicos Planetarum superiorum motus, prout hi secundum Tychonis Hypothesin è duobus compositi (Planeta enim quilibet primarius, præter motum in orbita sua proprium, alio etiam simul gaudet motu, dum quæ-vis orbita cum Sole, annuo per Zodiacum spatio, circumfertur) in unum per lineas curvas ad spirales quam proximè accedentes hic indigitatum, degenerant, quo perfectio et compendium Systematis Copernicani præ Tychonico magis pateat; in illo enim Planetæ primarij per unicam et eandem lineam simplicem in se perpetuò redeuntem semper motu suo unico orbitam circulari figuræ proximam describunt, hincque supervacanea motuum et spirarum multitudo penitus tollitur, imò etiam mira facilitate efficitur, ne Telluris tantùm centro, annuo spatio per suam orbitam lato, omnium primariorum Planetarum centra et nodi per idem spatium et tempus moveri supponantur. Tandem hic etiam indicamus, quod secundum Tychonis Hypothesin Mars certis temporibus in illo Mundi spatio, in quo aliàs Sol exstitit, hæreat, cum orbita Martis Solis orbitam secet, quod concinnitati Astronomicæ quam maximè repugnat: ex his igitur dictis facilè colligitur, multo credibilius esse, minora corpora vastissimum, quale Solis corpus est, quàm hoc cum universa rerum Machina circumire posse.

Cum orbitarum centra pro Planetis primarijs non longè à Solis centro seu nodo communi disient, Sol autem secundum Tychonem singulis annis periodum suam decurrat, hinc orbitas illorum ut et centra simul circumferri, ita tamen, ut Apsidum lineæ AB, prout fig. I indigitat, annuo spatio quoad sensum παραλλήλως procedant necesse est, sicque ob perpetuam orbitarum luxationem simultaneiq; et inperturbatum in his motu Planetæ lineas curvas in cælo definient, quod melius per Fig. II hic demonstratum dabimus: Sit igitur circulus intermedius in 15. partes æquales pro 15 quadrisseptimanalibus spatijs per annu exhibendis divisus, orbita Solis, extra hanc alia ex superioribus Jovis v.g. In hac si primo ponamus Jovem ad A. in linea Apsidum AB. et simul in conjunctione cum Sole ☉ è Terra ♁ spectari, orbita Jovis tunc erit in 0.0.0.0.0. jam verò si Sol ab ☉ ad 1. intra 4 Septimanas feratur, orbita Jovis simul promota ab A. ad 1.1.1.1.1. perstabit Jupiter interim quoque motu suo à puncto a. ad b. usq; motus. hic ab A. ad b. describet portionem alicuius lineæ curvæ jam si porro Sol in orbita sua per secundum spatium, quadrisseptimanale ab 1. ad 2. moveatur, orbita Jovis in 2.2.2.2. existet, Jove interim per tantum iterùm spatium quantùm erat primum ab a. ad b. ita, ut ac sit duplum lineæ a b lato, alia continuata portio b. c. et sic ulterius procedendo, tota linea quæsita inter lineas curvulas numeranda dabitur.

TABULA SE NOGRAPHICA

Lunarium Macularum exact o secundum Nomenclaturam Præstantiss ronomorum

HEVELRICCIOLI

Curiosis Rei oribus exhibetur

IOH. GABR ERO MATH. P.P.

IOH MANNI

Majes

Sic maculosa licet, tamen est formosa Diana.

Phasis Lunæ crescentis.

Ultima Quadratura.

Prima Quadratura Lunæ.

Luna senex in conjunctionem properans.

Phases Lunæ crescentes.

Phases Lunæ decrescentes.

Milliaria Germanica.

Digiti Ecliptici et eorum segmenta.

Nullum inter corpora cælestia, ex quo tempore Veteres sacræ Uraniæ addicti omnò moverunt lapidem, ut Siderum naturæ & affectiones quam maximè foverent in aprico positæ, cunctorum vicit magis admirationem, & multiformi ambage (si cum Plinio loqui liceat) torsit contemplantium ingenia, proximum quippe ignorari sidus indignantur, quam ipsa Luna, varietate macularum imprimis miranda; sed nec mirari nos subeat, cum medijs tunc destituti, quibus nunc Lunam accuratius inspicere & contemplari nobis hodie datum, oculis scilicet armatis; hinc etiam deficiente hoc Tuborum opticorum apparatu diversas de Lunæ substantia & maculis nudo oculo visis fovere opiniones non potuere non Antiqui illi rei siderææ Cultores; alij enim cum Clearcho & Argesinaæ maculas Lunares nostri Oceani imaginem in Luna tanquam in speculo conspicuam esse, alij hasce è certis corporibus, quæ Solem inter & Lunam jaceant originem ducere existimarunt; alij Lunam vitream, non quidem exactè pellucidâ, sed ex parte opacam; alij partim igneam, partim opacam putarunt; & quæ sunt multæ aliæ de corporis Lunaris substantia sententiæ.

At multo feliciori successu omnium primus celeberrimus ille Florentinorum Mathematicus Galileus de Galileis anno superioris seculi decimo, quo utilissimi Tuborum opticorum inventum luci publicæ traditum, id negotium tentavit, quod dein Scheinerus & alij satis superq; dedere probatum, imò plures hodie Tubis præ dictis ad majorem perfectionem nunc perductis, rem acu, quod ajunt, multo felicius tangere videntur, si pro indubio asserunt, quod Luna innumeris scateat montibus, qui nostros altitudine, habito respectu globi Lunaris ad nostrum, sexagies ferè minoris superent; porro quod eædem profunditates, quæ prægrandibus ambitu suo exteriori, plerumque circulari, mœnium instar, cinguntur, intus innumeras ferè et multò plures, sed non tantas et tam profundas, quam habeat Terra, si hujus cavitates suis destituerentur maribus; denique quod præ in Luna obscure, quæ sub primo conspectu non apparent profundæ, ideoq; pro liquida maribus scilicet multorum forsan judicio censendæ, adhibita accuratione, teste Viro celeberrimo D.no de la Hire, nihilominus profundæ nec tam deprehendantur; ut hinc haud pauci cum acutissimo Galileo Lunam pro terram à Terra diversam habente existimare possent, in qua etiam fortasse tiæ & res creatæ existant, quæ operationes edant ab imaginatione nostra motas, ita & prorsus alienas; quippe quæ nullam cum nostris similitudinem proin omnino sint à nostra cogitatione discrepantes.

Quamvis autem Luna profunditatibus et eminentijs quamplurimis pissimè tamen contingit, superficiem Lunæ in certis à Sole distantijs tutum videri, ut magnus ille montium & profunditatum numerus, qui dum distinctissimè observari poterat, non amplius tunc sub conspectum cadat; huius mutationis ex ipsa figura superiori A intermedia facile patescit, quæ profunditates inter novilunia et quadraturas. Luna crescente à dextris crescente autem hac à sinistris potissimum altissimorum circumjacentium obtegantur umbris; et quidem quod insuper tales pro vario Solis ad Lunam perpetuo immutentur (quæ proinde etiam novæ maculæ denominari, fo

tiæ autem, cum Sol illas à latere illuminat, quam maximè conspicuæ redntur; cum è contrario à quadraturis ad oppositionem superficies Lunæ, dumhisce inæqualitatibus magis magisque verticaliter imminere pergit, et omne, idquid umbrosum ante fuit, pedetentim illuminat, aliam semper exhibeat fim, ut tandem luminosa et albicans appareat.

Ex hoc fundamento bina nostra Schemata in delineatione macularum nolem etiam differentiam involvunt, eò quod primum, HEVELIANUM puta, Lun in oppositione cum Sole existente, hoc est, in plenilunio designatum, alterum o, RICCIOLINUM scilicet, è pluribus Lunæ phasibus in unum corpus fuerit lectum. In denominationibus macularum, utpote signis et significationibus arbirijs, dictos Auctores inter se differre hic in aperto videmus, cum Hevelius nona marium, regionum, fluminum et montium nostrorum imitatus, Ricciolus aum illustrium & de re siderea optimè meritorum Astronomorum, complurium cestim suæ Societatis Mathematicorum nomina pro usu Astronomico sibi eperit.

Bini circa Lunam limbi se invicem secantes nihil aliud, quam motus alicuius inna libratorij terminos, intra quos perpetua deprehenditur librationis variatio, bindicant; qui hodie demum per Tubos è diversa maculârum nonullarum mutione observatus, nec Veteribus olim notus fuit: eandem quippe nobis faciemstantissimè semper Lunam obvertere existimantibus: peragit autem hæc mom suum libratorium per quatuordecim circiter dies trigesima sexta tantum

diametri suæ parte in plagam superiorem ab Austro Corum versus, dum Luna versatur in descendentibus signis, in ascendentibus autem per idem tempus et spatium secundum Hevelii et aliorum observationes retrorsum iterum, et sic porro vacillare videtur.

Eodem temporis, menstruo nempe spatio Lunam quoque orbitam suam, dum porro et retro librationem absolvit, peragrare, et pro vario situ diversas phases, hoc est, luminis figurationes varias prout figura media inferior B subindicat, simul exhibere deprehendimus, cum pars Lunæ illuminata mox crescere, mox decrescere pro maiori vel minori Lunæ à Sole distantia debeat, quæ sanè luminis non proprij sed à Sole mutuati signa sunt indubia; interim non obstante, quod lumen quoddam debile haud multo ante et post novilunia Lunæ quasi innatum, de quo olim multa inter Astronomos movebantur lites, maculas Lunares nonnihil reddat conspicuas, cum extra omne dubium sit positum, hoc suam originem à Terra nostra superficie duodecies, et quod excedit, maiori quam illa Lunæ, radios Solis tunc temporis omnium copiosissimos in illam reflectente, habere, eò quod hac reflexione cessante, ipsum etiam putativum lumen nonnunquam planè cum ipsa Luna in Eclipsibus disparuerit.

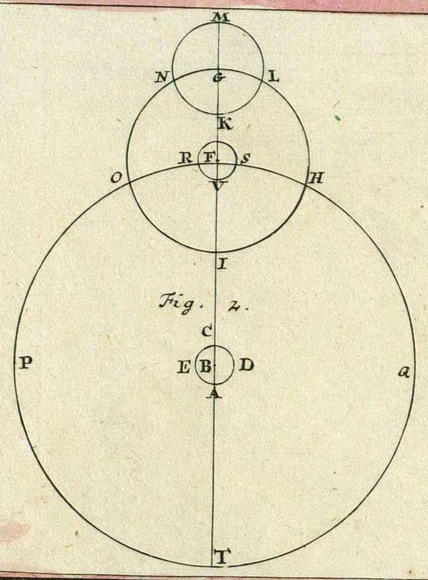
Ultimo denique loco duplices pro Luna mensuræ longitudinariæ notandæ quoque veniunt, quarum unam pro distantijs et magnitudine macularum ut et diametro Lunari, quæ secundum Hevelium 494 mensuratur milliaribus, per Germanica milliaria definiendis, alteram pro quantitate Eclipsium Lunarium tum secundum digitos Ecclipticos quam eorum partes exactè describenda, huic tabulæ appositimus.

THEORIA LUNÆ

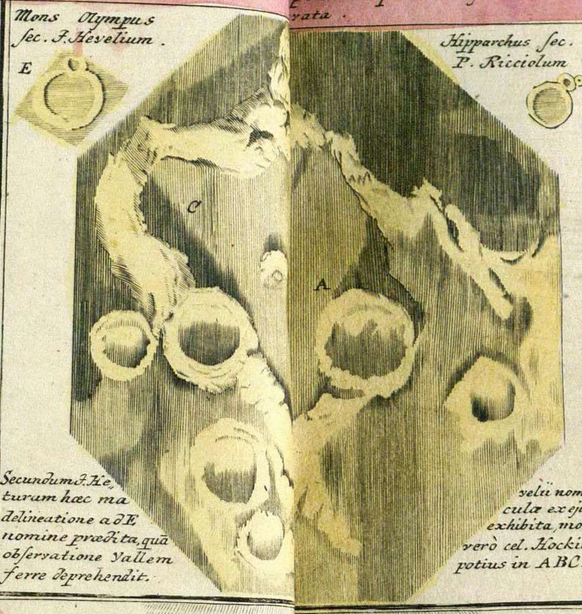
in qua motus ejusdem anomalus ex Hypothesi ill: Isaaci Newtoni, ut et Tychonica

a IOH. GABR. DOPPELMAIERO Academiæ Cæsar. Leopoldino-Carolinæ
Sumtibus Hered.
...rvo illius motus cycloidalis et libratorius cum aliis Phænomenis ad Lunam spectantibus sistuntur,
...Regiarum, Britannicæ et Borussicæ Sodali, nec non Mathem: Professore publico.
...æ cum Privil: S.C.M.

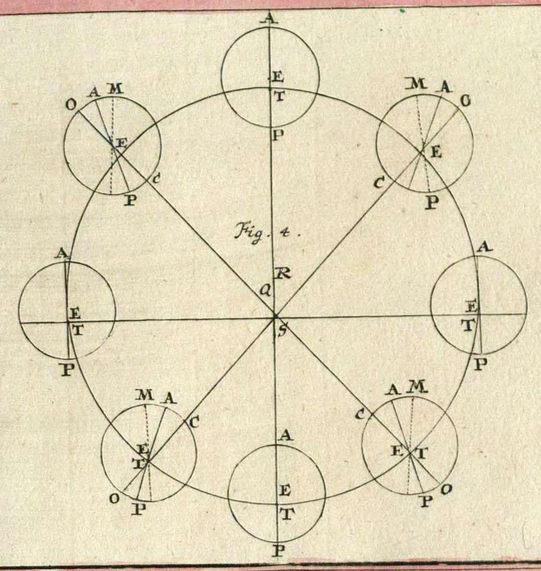
Hypothesis motus lunaris Tychonica.



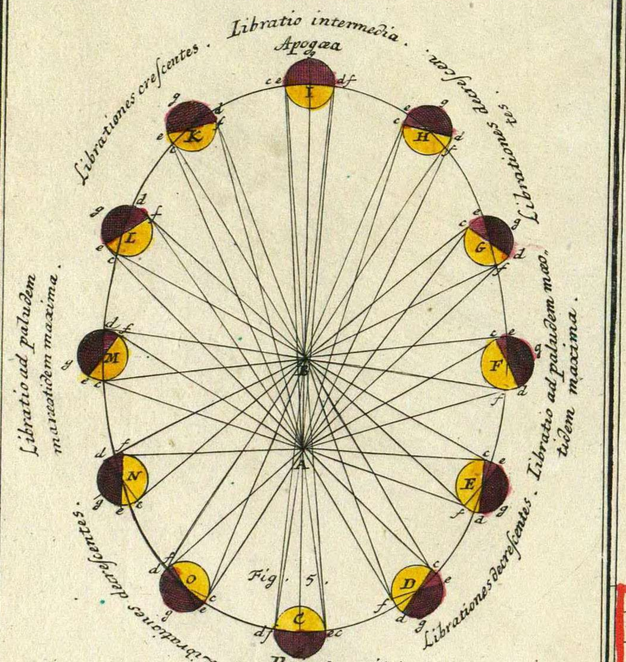
Macula lunaris secundum Hevelium Mons Olympus ut et J.B. Ricciolo, Hipparchus sec. P. Ricciolum



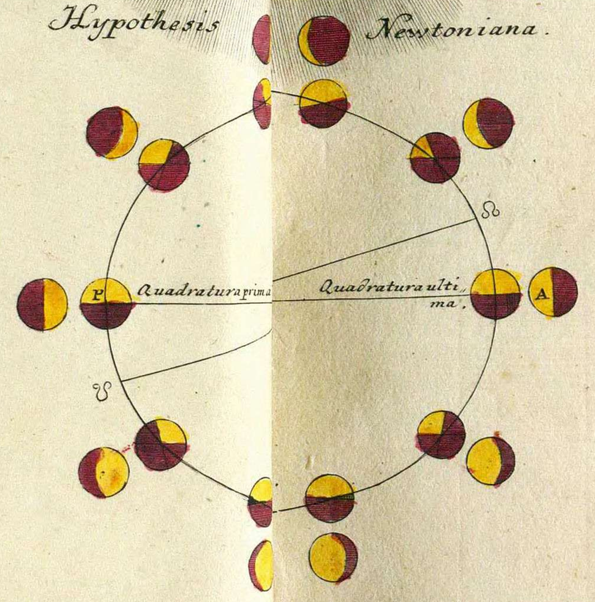
Hypothesis motus lunaris Horroccio-Flamstediana.



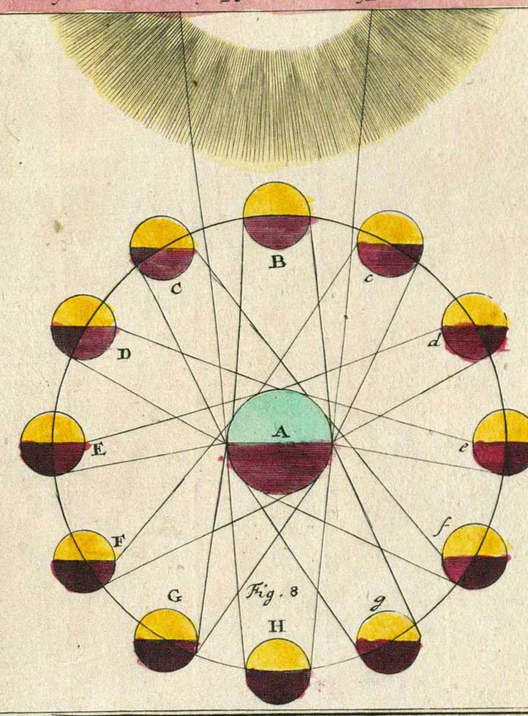
Librationes Lunæ sec. longitudinem è Joh: Hevelii Observationibus.



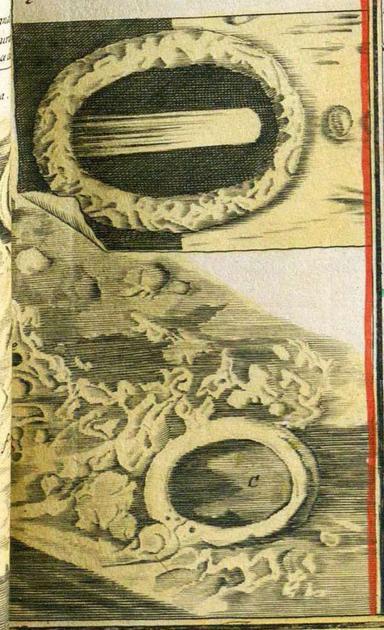
Hypothesis Newtoniana.



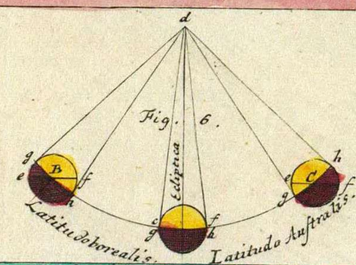
Phænomenon luminis Lunæ secundarii è radiorum solarium in eandem a Terra reflexione orti, ante et post novilunia conspiciendum.



Macula Platonis.



Libratio Lunæ sec. latitudinem.



De Theoria Newtoniana.

Lunæ motus tot anomaliis obnoxius est, ut achibitam operam multorum Astronomorum olim eluserit, sed jam ill. Newtonus diversas motus hujus inæqualitates ex observationibus Flamstedianis feliciori successu ad arctiores leges restrinxit, quæ sequentes sunt (1). Luna in Syzygiis celerrime, in Quadraturis tardissime movetur (2). Lunæ motus pro varia a Syzygiis distantia, ab illis ad Quadraturam proximam tardior, a Quadraturis ad Syzygias celerior est, qua inæqualitas variatio tychonica dicitur (3). Porro Luna in Apogæo tardius, in Perigæo celerius movetur (4) cum Terra in Aphelio versatur, motus Lunæ intenditur, in Perigæo vero iminuitur, unde differentia quadam inter tempora Lunaperiodica oritur. (5) Linea Apsidum in lunari orbita pergrore annos motu inæquali ferretur, accessu in ortum, nam illa in Syzygiis celerius progreditur, et in Quadraturis remissius, retrogreditur. (6) Linea Nodorum per 19 fere annos in antecedentia, motu quoque inæquali volvitur, hæc enim in Syzygiis quiescit in Quadraturis vero notabilem velocitatem acquirit. (7) Orbita Lunæ perpetuo ...ejus excentricitate mutatur, quæ interdum augetur, interdum minuitur, maxima excentricitas in Syzygiis oritur, minima, autem, ubi Syzygiarum linea ad angulos rectos secatur, quarum differentia dimidiam excentricitatem minimam non excedit. (8) Orbita lunaris inclinatio ad Ecliptican etiam mutatur, quæ in Syzygiis minima, et in Quadraturis maxima deprehenditur.

De Theoria Tychonica et Horrocciana.

Cel. Tycho sequentem, pro salvandis anomaliis, exhibuit Theoriam. A est Terræ centrum, per quod ecBcirellus ADE pro centri motu excentrici FFTQ ducitur, hoc centrum in Syzygiis veris semper in A, et in Quadraturis in C versatur. Porro F centrum epicycli primi IHG, quod primo in diametro RS circuli RSV etiam versus R quam P. libratur. Dein etiam cum centro Epicycli secundi KLMN. et corpore Lunæ movetur in consequentia. Tandem quoque centrum G epicycli secundi in circumferentia primi hac ratione motum suum absolvit, ut cum Luna in Apogæo et centrum secundi in E, deprehenditur hoc perpetuo in semiculo inferiori secundum Signorum seriem; cum vero Luna ad Perigæum et Centrum ad I pertingit idem in superiori semicirculo O. G. H. contra Signorum ordinem in antecedentia volvatur. Ex hac supposita Thatria Tychonica Lunæ inæqualitatem primam et secundam, imò et tertiam novam, quæ ipsi variatio dicitur, demonstrare conatus, de qua alibi plura. In Theoria Horrocciana: S. est Sol, A centrum orbitæ ellipticæ Terra TXYZ. et B focus superior, E centrum orbitæ lunaris; EI ejusdem excentricitas, A Apogæum Lunæ verum, M. Apogæum C medium, et in horum partibus oppositis Perigæum verum et medium. Hisce datis notatur (1) Excentricitas Lunaris orbitæ mutabilis (2) Linea Apogæi veri dupliciter variabilis (3) Motus Lunæ medius in Aphelio Terræ velocior, tardior vero in ejus Perihelio. (4) Motus Lunæ circa Syzygias paulo celerior quam circa Quadraturas. (5) Motus Nodorum inæqualis. (6) Inclinatio orbitæ C ad Ecliptican mutabilis. (7) Æqualitas temporis, quo volvitur Luna, cum mense periodico (8) sicus haud congruus axis lunaris cum Ecliptica vel orbitæ lunaris axibus. vid. cel. Whistoni Prælect. Astronom.

Macula lunares sec. Ricciolum, ...

Mons Eryx et lacus niger Major ...

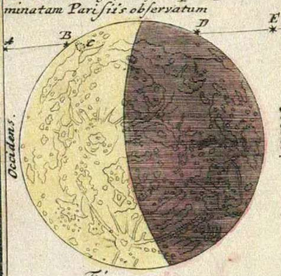
...23 Aug. et 22 Sept. Anno 1727 per tubos opti...
Franc. Bianchino observatæ.

...us, et Plato sec. Hevelium, Mons Terrorum

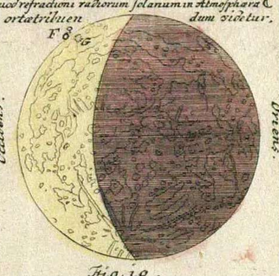
(Inter et I.)

Ex margine hujus maculæ Platonis dictæ cad... uber Solis radius supra ipsius fundum obcu... et per Tubum 150 palmar. Franc. Bianchino Roma...
A. Macula Aristotelis, B. Eudoxi, C. Platonis,
D. Macula nullo nomine adhuc insignita.
e. f. ductus rectilineus, directus,
in exiguam maculam q...
...harea triangula,
...ris.

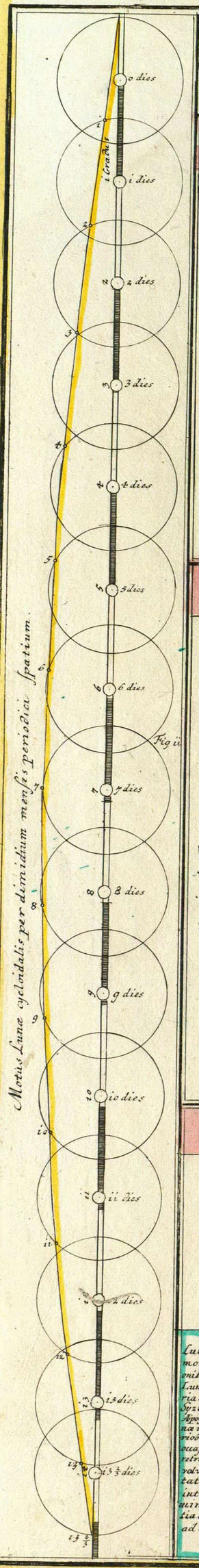
Palilicium die 19 Aug. A. 1699 in appulsu ad Lunæ limbum supra ejus coporis partem illuminatam Parisiis observatum



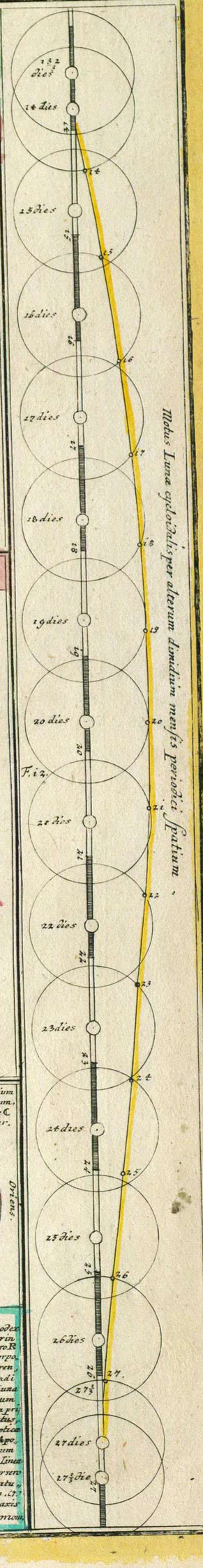
Idem Phænomenon die 5 Martii A. 1715 circa initium occultationis Veneris a Luna Massiliæ observatum, quod refractioni radiorum solarum in Atmosphæra C. ortat tribuen... dum videtur.



Motus Lunæ cycloidalis per dimidium mensis periodici spatium.



Motus Lunæ cycloidalis per alterum dimidium mensis periodici spatium.



THEO…CLIPSIVM

in qua variæ Solis occultationes, obscurationes Terræ et Lun… occultationes a Luna, aliaq; Phænomena huc spectantia, sistuntur

a IOH. GABR. DOPPELMAIER P. O. Acad. Cæsar. Leopoldino. Carol. Mat… que Regiarum Britanicæ et Borussicæ, Sodali ut et Mathemat. Prof. publ. …norum cum Pr. S. C. M.

Sumtibus …

Octo Mercurii sub Sole transitus qui ab anno 1631 usque ad an. 1736 mense Novembri, ad Nodum ascend. (excepto illo a Dionysio Observatt.

Septentrio. Ortus. Occasus. Meridies. Ecliptica. Fig. 6. A. 1736. A. 1690. A. 1661. A. 1631. A. 1723. A. 1677. A. 1651. A. 1697.

Typus eclipsis Lunæ partialis.

Septentrio. Ortus. Meridies. Ecliptica. Umbra Terræ. Fig. 2.

Typus eclipsis Lunæ totalis cum mora magna et sine mora.

Septentrio. Umbra Terræ. Fig. 3. Meridies.

Venus in Sole observata Hoolæ, trans Liverpoliam in Anglia, A. 1639 die 24 Nov. Styl. Iul. vel die 4 Decembr. St. Greg. a Jeremia Horrocio.

circa Vesperam. Zenith. Linea Fig. 9. Ecliptica. Diameter. Solis. Meridies. Venus.

Tabula in qua ad unos supra datos dies conjunctionum Mercurii cum Sole, harum Observatores et Observationum loca exhibentur.

Num. ord.	Anno	Tempus conj. Sen.	Observatores.	Loca Observationum.	Num. ord.	Anno	Tempus conj. Sen.	Observatores.	Loca Observationum.
1	1631	d. 7 Nov.	Petr. Gassendus.	Parisiis.	5	1690	2 Nov.	Wurzelbaur. G. Kirch.	Norimberga. Erfordia.
2	1651	d. 3 Nov.	Jer. Shakerlæus.	Surata in India.	6	1697	d. 3 Nov.	Wurzelbaur. et Cimarrus. Cassinus.	Norimberga. Parisii.
3	1661	d. 3 May.	Joh. Hevelius. Hugenius. Streetz.	Dantiscum. Londinum.	7	1723	d. 9 Nov.	Com. Hallejus. Jac. Cassinus.	Londinum. Parisii.
4	1677	d. 7 Nov.	Hallejus. Com. Hallejus.	Avenio. Insula Helena.	8	1736	d. 11 Nov.	Manfredius. Marianinus. Chr. Kirchius.	Bononia. Venetia. Berolinum.

Graphica designatio orbis veteris fere totius, per cujus maximam partem, et quidem … et corr. tam totalis quam partialis …

Transitus et occultationes planetarum primariorum a Luna.

Occultatio 4 Virginis d. 4 Aug. 1708. Jan. a Christf. Kirchio, Gedani observata. Occultat. A. 1671. d. 1. Occult. d. 3 Aug. 1681 d. 21 Aug. a J. Hevelio observata. Junii St. n. a Hevelio observata. Feb. a Jac. Cassino observ. Fig. 10. Transitus 4 Aug. d. 24 Aug. a J. H. Hoffmanno Berolini observ.

DIAGRAMMA HIPPARCHICUM pro Eclipsibus Solis et Lunæ

Fig. 1. A. S. Q. B. C. F. G. M. L. N. K. D. H. T. I. E. X. n. q. R. o. a. V. c.

Centra, Semidiametri vera, distantiæ aliaque, in hac Theoria sequentia notanda.

S. Centrum Solis; T Terræ; L Lunæ nove; p centrum, in conspicuo Lunæ plenæ positum.

SB. Semidiameter vera Solis; TE Terræ; LN Lunæ; Quadra Terræ perigæa; Quadra apogæa.

ST. Distantia Solis a Terra; SL Lunæ; CL umbrosæ umbræ terrestris; SF Solis a Terra apparens.

LT. Distantia Lunæ a Terra, quæ varia est; Distantia a Terra Lunæ perigæa; a Terra Lunæ apogæa.

DCE. Cornus Terræ umbrosus; MLN Cornus Lunæ umbrosus, quietiam variant, &c. & sæpe penumbrosus.

HGI-AGB. cornua Lunæ penumbrosa.

Semidiametri apparentes, seu parallaxes horizontales in Sole Terra et Luna etc.

S.B. Semidiam. app. Solis in Centro Terræ, seu parallaxis Solis in Terra.

LTN. Semidiam. app. Lunæ in centro Terræ, seu parallaxis Lunæ in Terra.

SLB. Semidiameter apparens Solis in Luna, seu parallaxis Solis in Luna.

TLE. Semidiameter apparens Terræ in Luna, seu parallaxis Terræ in Luna.

pEQ. Semidiam. app. umbræ Lunæ in Sole, seu parallaxis Lunæ in Sole.

pEQ. Semidiam. app. umbræ Lunæ perigæa. aEV. apogæa.

pEQ. Semidiam. app. penumbræ Terræ TCE parallaxis maximis Umbræ Terræ.

Maculæ Solis insignes a die 9 Novembris usque ad is A. 1700 Parisiis observatæ.

Fig. 8. io. ii. i2. i3. gallen.

Fig. 15. Loca Terræ in quibus hæc Solis … Massilia. Genuæ. Mediolani. Sophiæ. Tyguri. Ulmæ. Veoburgii ad … Norimbergæ. Locus Terræ. Arc. Lati. Monte regis Iulio. Avenione. Barcinonæ. Fig. 1. Fig. 2. Fig. 3. Fig. 4. Fig. 5. Fig. 6. Fig. 7. Fig. 8. Fig. 9. Fig. 10. Fig. 11. Fig. 12. Fig. 13. Fig. 14. Fig. 15. Fig. 16. Fig. i. Fig. ii. Fig. iii. Fig. iv. Fig. v. Fig. vi. Fig. vii. Fig. viii. Fig. ix. Fig. x. Fig. xi. Fig. xii. Fig. xiii. Fig. xiv. Fig. xv. Fig. xvi.

Typus eclipseos Solis seu potius Terræ, universalis.

Septentrio. Initium. Finis. Ortus. Meridies. Fig. 4. C. Centrum Terræ. M. A. I. B. N. Disc. Terræ illuminatus. D. F. H. I. G. E. centrum circuli, intra quem penumbra terminatur. DE. via … CH. I. Linea … laris ad … CIR. linea … laris ad orbitam.

Typus eclipseos Solis partialis in Horizonte quodam.

Septentrio. Orbita Lunæ. Eclip. Occasus. Meridies. Fig. E 5. C. Centrum Solis. DE. A et B. Centrum Lunæ. F Centrum Lunæ in medio Eclipseos.

Eclipses Solis diversi generis, quæ e cono Lunæ umbroso secundum variam longitudinem ad Terram tendente oriuntur.

a. Perihelium Terræ. b Aphelium Terræ. c Centrum Solis. e Eccentricitas. d Apogæum Lunæ. f Perigæum Lunæ. Orbita Lunæ. Terra. Fig. ii. g. Eclipsis Solis sine mora. h. Eclipsis Solis partialis. h. Eclipsis Solis cum mora. a. Eclipsis Solis annularis.

Transitus et occultationes nonnullarum fixarum primæ magnitudinis a Luna.

Fig. 12. Occult. Palilicii A. 1717. Die 15 May a P. Feuillée obs. d. 25 Sept. ad Kirchio obs. a Hevelio observ. Occult. cordis M. A. 1710. Oc. cordis M. A. 1698. d. 8 maji st. Transitus Palilicii A. 1717 die 22 Octobr. a Christf. Kirchio Berol. Observatus.

Zodiacus macularum solarium (in Fig. 13) et motus periodicus earundem circa solis centrum, respectu motæ terræ in Fig. 14.

C. Centrum Solis. HCI Ecliptica. KCL Æquator. A. et B. Poli Ecliptica. AB. axis ejusdem. Mot. N. Poli Æquatoris. M.N. axis ejus. H B. LEFG Zodiaci, macularum solarium. Fig. i3. S. Sol. a. c. e. b. f. Æquat. Solis. T. Terra. g. h. Ecliptica. Fig. i4.

Typus eclipsis Solis seu potius Terræ, universalis. — De eclipsibus Lunæ. — De eclipsibus Solis. — *Typus eclipseos Solis partialis in Horizonte quodam.* — *Transitus et occultationes planetarum primariorum a Luna.* — *Zodiacus macularum solarium (in Fig. 13) et motus periodicus earundem circa solis centrum, respectu motæ terræ in Fig. 14.*

THEORIA SATELL

in qua præcipua horum planetarum secu

à IOH. GABR. DOPPELMAIERO, *Acad. Imp. Leopoldino-Carolina*

Sumptibus Hæred

De Phænomenis motus Satellitum Iovis et Saturni.

Planeta secundarii in orbitis ellipticis motum ab occasum ortum inæqualem, circa suos primarios, lunarum instar, perpetuo exercent, et deficiunt, ductis ad illorum centra lineis, pari ratione areas temporibus proportionales; at vero, nostri respectu, Iovis et Saturni infecle in orbitarum suarum partes inferiores delati, per viam contrariam, nempe ab ortu in occasum, moveri videntur; ex quo varii comitum situs notatu perquam digni. (Fig. 10. 11. 12.) imo et ex illorum revolutione cum primariis, motus lineis cycloido-sphæralibus combinati oriuntur. (Fig. 8. 9.) quibus probe perlustratis magnum hac Theoria incrementum capiet.

Planeta iidem secundarii visui nostro, varios tribuenda, cum vero ejusdem orbem illustrant, qui possit, saepius per ris subit. Primi quidem ti modo contingunt. onem cum Sole per illa gradum ad H.

Situs Satellitum Iovis et Saturni variis notatu digni.

Fig. 10.

Quatuor Satellites Iovis eodem tempore latentes.

Fig. 11.

Periodi Satellitum Iovis sec. novissimas observationes Cel. Iac. Cassini.

	D.	H.	M.	S.
Primi	1	18	28	36
Secundi	3	13	17	54
Tertii	7	3	59	36
Quarti	16	18	5	7

Digressiones maxima Satellitum Iovis ab ejus centro sec. easdem observ. Cassinianas.

per Sdm Iovis.

		Gr.	Min.	Sec.
Primi	5 3/4	hinc	Primi	0. 3. 55
Secundi	9.	Diam.	Secundi	0. 6. 14
Tertii	14. 33/60.	Orbitæ	Tertii	0. 9. 38.
Quarti	25 58/60	in Cælo	Quarti	0. 17. 30.

Eclipses Lunares in Iove.

Orb. quarti

Fig. 13.

Orb. Emersiones tertii.

Orb. secundi.

Orb. Immersiones primi Satellitis.

Solis (vulgo dicta) Eclipsis in Iove.

De aliis Eclipsibus in Iove et Satur

Secundum Eclipsium genus, quod tum vulgo dictis solis, rectius terræ defectibus comparatur, omnium primo Bononiæ à cel. J. D. Cassino. A. 1665. dein et ab aliis Astronomis sæpius per Tubos optices probe notæ in Iove observatum, cum iidem ante et post Iovis cum Sole oppositionem umbram unius altiorisve comitis per Iovis discum, macula instar, ab ortu in occasum mobilem viderent (vid. Fig. 2 et 3) hac umbra à corpore suo tanto minus distabat, quo minus Terra à loco tempore præc. ex oppositionis remota deprehendebatur; inqua, nulla denique inter se differentia distantiæ percepta, corpus ipsum Satellitis, cum in Iove corpus optice incidit, ob lumen utriusq. admodum notabile, fit inconspi =

cuum, et Satelles per di hujus conjunctionis oppositione non nihil junctio non vera, pr jorialem in situ ad E. F. HI. Iovem vialis in n. et p. cum denique, orbitas secund riarum respectu, ma sistanteur; exhibitas

VIS ET SATURNI,

omena geometrica designatione sistuntur.

ietatumq. Regiarum, Anglicanæ et Boruſſicæ, Sodali et Mathem. Prof. P.

anorum, Noribergæ. Cum Pr. S. C. M.

mitum Iovis et Saturni, et quidem primo de lunaribus.

ignes, spectabiles, sæpius præcipua harum Eclipsi, bra primarii, vel intra m lucido corpore non distin, tet, et eclipses duplicis gen bus nostris affines sequen Iovis ante et post conjuncti latentes post trigesimum ab mmergi, nulla observanda

mersione, qua pone corpus accidit, tertius tamen non nunquam, et quartus sæpius, in distantia 60 graduum à conjunctione, circa I. emersionem... quoque, et hanc ad 30 graduum gradum versus oppositionem, circa M. exhibebuntur. tunc vero ab M. per A. ad B. usque, et immersiones et emersiones, ob corporis primarii interpositionem, cessabunt, ad B. post trigesimum oppositionis gradum sex. tabuntur omnium emersiones, ut et immersiones, tertii et quarti à C. per D. et E. ad F. ubi denique ab F. ad H. tempore conjunctionis ad C. celebrato, inter rea et Iupiter et Satellites ejus, ob ociasum heliacum, latebunt.

Alii situs Comitum Saturni et Iovis notabiles.

Fig. 12.

Periodi Comitum Saturni sec. novissimas observationes Cel. Iac. Cassini.

	D.	H.	M.	S.
Primi	1	21	18	27.
Secundi	2	17	44	22.
Tertii	4	12	25	12.
Quarti	15.	22.	34	36.
Quinti	79.	7.	47	0.

Digressiones maxima comitum Saturni à hujus centro sec. easdem observ. Cassinianas.

per Sdm ♄.

		Gr.	Min.	Sec.
Primi	1 4/13	hinc	Primi	0. 1. 27.
Secundi	2 1/2	Diam.	Secundi	0. 1. 52
Tertii	3. 1/2	Orbitæ	Tertii	0. 2. 36
Quarti	8.	in Cælo	Quarti	0. 6. 0
Quinti	23.		Quinti	0. 17. 25

Fig. 14.

Orb. primi Satellitis.

De motu luminis successivo ex Hypothesi Olai Roemeri.

Cel. Cassinus et Roemerus, ex comparatione observationum Iovialium inter se probe institutarum, deprehenderunt, primum Satellitem post oppositionem Iovis cum Sole, Terra in B. consistuta, tardius. (vid. Fig. 1) et eadem cum differentia 1' minutorum à calculo, ad H. emersisse; à conjunctione vero L per D et E ad M. eundem Satellitum tempus per calculum exhibuerunt antici passe in immersiones ad G. e quibus Phænomenis Roemerus spatium terræ suarum primam, majorem et minorem, à Iove pertingere, qua apud multos applausum meruit. sed hæc, cum illa in reliquis tribus deficerent, a pluribus iterum denegata.

Fig. 1.

Systema Telluris.

Orbita Lunæ.

Systema Ioviale.

Orb. primi Satell.

Orbita secundi Satell.

Orbita tertii Satellitis.

Orbita quarti Satellitis.

Systema Saturnium.

Orb. primi Com.

Orb. secundi Com.

Orbita tertii Comitis.

Orbita quarti Comitis.

Orbita quinti Comitis.

14

Semitæ Circumjovialium, quæ ex motu Iovis et cujusvis Satellitis oriuntur.

Fig. 8.

Semitæ Comitum Saturni ex ejusdem motu et cujusque Comitis oriuntur.

Fig. 9.

BASIS GEOGRAPHIÆ R… … IORIS ASTRONOMICA

in qua situs locorum insigniorum geographici ea exactitudine, qua celeberrimi Astrono… observationes è plurimis luminarium et circumjovialium Eclipsibus nobis hactenus suppeditarunt pro certiori Geograp… …to positi designantur

A IOHANNE GABRIELE DOPPELMA… P. operâ IOH. BAPT. HOMANNI S.C.M. GEOGR.

Cum Privile… …) Sac. Cæs. Majestatis.

Nomina Locorum.	Observatores Viri celeberrimi DD.	Longitudo observ.	ex Eclips.	Latitudo observ.
HISPANIÆ.				
Madritum	PP. Cassini et Petræus	15° 24′ 15″	☉ ☽	40° 26′ 0″
Hispalis	----------	14 0 10	☽	37 36 0
Corduba	Pet. Ant. de Blancas	16 45 45	☽	37 56 0
Valentia	----------	19 24 45	☽	39 30 0
Majorca	----------	22 40 15	☽	39 35 0
Gadix	----------	14 3 0		36 33 36
PORTUGALLIÆ.				
Ulyssipo, Lisbona	Couplet	11 25 0	☿ ☽	38 45 25

Nomina Locorum.	Observatores Viri celeberrimi DD.	Longitudo observ.	ex Eclips.	Latitudo observata
GALLIÆ.				
Lutetiæ Parisiorum.	Picard, Cassini & de la Hire	22° 36′ 0″	☽ ☉ ☿	48° 50′ 20″
Lugdunum, Lyon.	PP. Bonet & Affelin.	24 54 45	☉ ☽	45 45 20
Massilia, Marseille.	P. Laval & Chazelles	25 37 0	☿ ☽ ☉	43 19 33
Rupella, Rochelle.	Des Hayes.	19 6 45	☉ ☽	46 10 15
Arelatum, Arles	Daviziard.	24 51 0	☉	43 34 22
Aquæ Sextiæ Aix.	Gaultier.	25 42 0	☿ ☉	43 31 20
Mons Pessul. Montpellier	Plantade & Clapiers.	24 2 30	☉ ☿ ☽	43 36 50
Tolo Martius, Toulon.	De la Hire.	26 5 30	☿	43 6 40
Turones, Tours.	Nonnet.	20 52 0	☉ ☽	47 23 40
Antipolis, Antibe.	De la Hire.	27 17 45	☿	43 34 12
Brestia, Brest.	Picard & De la Hire.	15 56 0	☿	48 23 0
Avenio, Avignon.	P. Bonfa, P. Feuillée	23 2 0	☉ ☽	43 57 0
Caletum, Calais.	De la Hire. Picard	22 57 30	☿	50 56 50

Nomina Locorum.	Observatores Viri celeberrimi DD.	Longitudo observ.	ex Eclips.	Latitudo observata
Ambianum, Amiens				
Perpinianum, Perpignan				
Aurelia, Orleans.				
Bajonna, Bayonne.				
Narbo, Narbonne.				
Pahum, Pau.				
Biturix, Bourges				
Diepa, Dieppe.				
Dixio, Dyon.				
Flexia, La Fleche				
Lingones, Langres				
Rothomagus Rotien.				
Nannetæ, Nantes				

Nomina Locorum.	Observatores Viri celeberrimi DD.	Longitudo observ.	ex Eclips.	Latitudo observ.
GALLIÆ.				
Fanum S. Maclo S. Malo	Picard et De la Hire.	18° 0′ 0″	☿	48° 38′ 30″
Rejon.	Idem.	19 1 15	☿	45 30 53
HELVETIÆ.				
Genevæ.	Wolfer et Gautier.	26 37 30	☉ ☾	46 12 0
Tigurum.	Scheuchzer	28 42 20	☉ ☾	47 24 0
SABAUDIÆ.				
Augustæ Taurinorum	----------	23 5 0	☽	44 50 0
SUECIÆ.				
Upsalia	Vallerius	40 3 30	☽ ☉	59 54 0
Torno in Bothn.	Maupertius	43 15 0	☿	65 50 50

Nomina Locorum.	Observatores Viri celeberrimi DD.	Longitudo observ.	ex Eclips.	Latitudo observ.
GERMANIÆ.				
Vienna Vindobona	Regiomontanus	37° 2′ 30″	☽	48° 14′ 0″
Praga	Tycho	34 55 0	☽	50 4 30
Noriberga	Wurfelbau Eimmart	31 14 0	☽ ☿	49 26 7
Argentoratum	Eisenschmid	28 0 0	☽ ☿	48 35 51
Berolinum	Kirch & Hoffmann	33 37 15	☽ ☉	52 30 20
Hamburgum	----------	30 14 0	☉	53 42 0
Kilonium Kiel.	Reyherus.	31 23 0	☽ ☉	54 25 0
Uratislavia	P. Heinrich	37 18 0	☉	51 17 0
Lipsia	Rivinus Huius.	32 30 0	☉ ☽	51 20 0
Citium Zeitz	Teuberus	32 22 30	☉	51 7 0
Neoburgum ad Dan.	PP. Jesuitæ	31 10 45	☉	48 38 0
Cassellæ	S. Hasse Landgr.	29 30 0	☽	51 19 20
Iena.	Kirnbergerus	31 34 0	☉	51 2 0

Nomina Locorum.	Observatores Viri celeberrimi DD.	Longitudo observ.	ex Eclips.	Latitudo observ.
ANGLIÆ.				
Londinum	Wright, Flamsteed	20° 4′ 45″	☽ ☿ ☉	51° 32′ 0″
Grenovicum	Flamsteed	20 12 30	☉ ☽ ☿	51 28 30
Oxonium	Halley	18 15 0	☽ ☿	51 44 30
SCOTIÆ.				
Edenburgum	----------	24 4 45		55 58 0
HIBERNIÆ.				
Dublinum	Molineux	15 9 35	☽	53 22 0
DANIÆ.				
Hafnia	Picardus, Roemer	32 53 25	☽ ☿	55 40 45
Uraniburgum	Tycho. Picardus	33 2 30	☽ ☿	55 54 25
Lundia	----------	33 52 15		55 42 30
POLONIÆ.				
Warsovia	Nuevius	41 45 0	☽ ☿	52 14 0
Dantiscum	Hevelius	38 41 15		54 22 32
MOSCOVIÆ.				
Moscua	Timmermannus	60 30 0	☽	55 36 10
Petropolis	De l'Isle	50 30 0		60 0 0

Nomina Locorum.	Observatores Viri celeberrimi DD.	Longitudo observ.	ex Eclips.	Latitudo observ.
ITALIÆ.				
Roma.	Francisc.	29° 30′ 0″	☿ ☉ ☽	41° 54′ 0″
Mutina, Modena.	P. P. Riccioli	31 29 30	☉	44 38 30
Florentia.	----------	31 37 30	☉ ☿ ☽	43 46 30
Bononia, Bologna.	Manfredi	31 56 0	☉ ☿ ☽	44 30 15
Ferrara.	----------	28 45 45	☉ ☽	44 54 15
Genua.	Mary, Halley, Chazelles	24 20 0	☿	44 27 0
Malta Ins.			☿	35 52 30
TURCIÆ.				
Constantinopolis	Chazelles	47 3 30	☿	41 6 0
Smirna.	P. P. Feuillée	36 29 15	☿	38 28 0
Aleppo.	----------	43 28 0	☿	36 45 30
Thessalonica.	P. Feuillée	35 27 45	☿	40 40 10
Trapezus.	P. Dan.	39 12 45	☿	41 3 30
Erzerum.	Idem	45 10 0	☿	39 56 85
Mylo Ins.	P. Feuillée	34 22 30	☿	36 41 0
Canea in Candia	Idem	25 28 0	☿	35 28 45
Candia.	Idem		☿	35 18 45
TARTARIÆ MAGNÆ.				
Seringua.	P. Gregor.	129 47 0	☿	52 49 0
Kokotam.	Idem	135 2 0	☿	43 42 0

Nomina Locorum.	Observatores Viri celeberrimi DD.	Longitudo observ.	ex Eclips.	Latitudo observ.
CHINÆ.				
Pekinum	PP. Jesuitæ, Fontaney et Comte	136° 46′ 30″	☿	39° 54′ 20″
Canton	Idem	133 12 0	☿	23 7 46
Macao	Idem	135 18 15	☿	22 12 0
Nankin	Idem	139 34 0	☿	32 7 45
Ning po S. Liango	Idem	141 45 0	☿	29 56 0
Kiam cheu	Idem	142 8 15	☿	33 37 0
Kam hay	Idem	142 8 45	☿	31 14 0
Sin-ghan-fu	Idem	139 53 45	☿	34 16 45
Sucheu-fu	Idem	140 48 15	☿	31 27 50
Hoangnam	P. Noël	139 5 45	☿	33 52 0
Inf. Hummim	Idem	141 37 30	☿	31 52 0
INDIÆ.				
Goa.	P. Noël	93 55 0	☿ ☽	15 31 30
Siam.	Idem	121 0 0	☿ ☽	14 18 0
Malaca.	Idem	124 15 0	☽	2 22 0
Agra.	----------	98 54 0	☽	26 43 0
Ballasore	Harry	99 50 0	☽	21 22 0
Loreo	P. P. Jesuitæ	120 45 15	☽	14 45 30
Bord. Triquimale	P. Noël	103 30 15	☽	8 50 0 inc.
Batavia.	----------	120 54 0		6 15 0 Aust.
Pondicheri	----------	100 30 0		11 54 0
C. Comorin.	----------	98 25 0		8 0 0

Nomina Locorum.	Observatores Viri celeberrimi DD.	Longitudo observ.	ex Eclips.	Latitudo observ.
AFRICÆ.				
Tripolis in Barb.	P. Feuillée	33° 41′ 0″	☿	32° 55′ 40″
Cairus in Ægypto	Chazelles	52 5 0	☿	30 2 30
Alexandria in Ægypto	Idem	50 28 30	☿	31 11 0
Gorgia, Insul. del Cobrit	Varin, Des Hayes, de Glos	3 5 0	☿	14 58 52
Cap Viride Prom. Afr.	Idem	3 0 0	☿	14 43 0 Aust.
Cap bonæ Spei	P. P. Jesuitæ	40 14 30	☿	34 15 0 Aust.
S. Helena Insul.	Halley	14 3 0	☿ ☉	16 0 0 Aust.
Terra del Esta in Madagasc.	Heathcot	64 39 45	☽	19 29 0 Aust.
AMERICÆ.				
Mexico		276 30 0		20 0 0
Carthagena	P. Feuillée	304 43 45	☽ ☿	10 26 35
Porto Belo	Idem	300 20 0	☿	9 33 5
Kebecam	Des Hayes	310 17 0	☿	46 55 0
Boston		309 52 15		42 25 0
Olinda	Richer	345 0 0	☿	8 12 50 Austr.
Cayenna Insul.		327 0 0	☿ ☽	4 56 18
Martinica Insul.	Varin, Des Hayes, De Glos	319 11 15	☿ ☽	14 48 9
Gadaluya Ins.	Idem	317 57 45	☿	14 0 0
Dom. de Boxe in S. Nilo	Insula Des Hayes, P. Feuillée	301 22 30	☽	19 58 0
Bermudes Insulæ	P. Feuillée	316 54 45		32 25 0
La Conception	Idem	306 57 30	☿	36 42 53 Austr.
Lima in Peru	Idem	303 20 30	☿	12 1 15 Austr.
Ylo in Peru	Idem	308 58 30	☿	17 35 15 Austr.

HEMISPHÆRI … OELI BOREALE,

in quo loca Stellarum fixarum secundum Æquatorem, per Ascen … mpe rectas et Declinationes ad annum Christi 1730 completum sistuntur

â IOH. GABRIELE DOPPELMAIERO Mathem. Prof. Publ. Acad … dino-Carol. Nat. Curios. et Reg Societatis Boruss. Sodali.

Operâ IOH. BAPT. HOM … Æ.S. Maj. Geogr. Norimbergæ. Cum Privilegio S.C.M.

NOMINA FIXARUM	Magnitudo	Ascensio recta ad Annum 1730 completum	Declinatio ad eundem annum completum
ANDROMEDA			
Caput Andromedæ	2.	358. 37. 39.	27. 37. 48.
Lucida Cinguli Mirach	2.	13. 42. 33.	34. 33. 37.
Lucidus Pedi Almac	2.	26. 33. 6.	41. 2. 36.
Dextra Scapula	3.	6. 21. 20.	29. 24. 49.
In Cinguli media	3.	10. 21. 59.	37. 2. 23.
ANTINOVS			
Sinistrum brachium	3.	287. 56. 46.	2. 38. 19.
AQVILA			
Lucida in Scapulis	1.	296. 23. 41.	8. 11. 1.
In humero dextro	3.	293. 30. 31.	10. 2. 13.
In Cauda	3.	283. 39. 39.	13. 31. 26.
ARIES			
Lucida in Vertice	2.	28. 1. 17.	22. 11. 38.
Secunda Arietis	3.	24. 51. 53.	19. 30. 1.
AVRIGA			
Capella	1.	74. 12. 41.	44. 43. 19.
Humerus sinister	2.	85. 2. 39.	44. 51. 22.
Brachium sinistrum	3.	84. 30. 10.	37. 11. 31.
Dexter pes	3.	69. 33. 42.	42. 43. 21.
BOOTES			
Arcturus	1.	210. 33. 42.	20. 40. 10.
Cingulum	3.	218. 1. 59.	25. 13. 44.
Dextra Tibia	3.	208. 30. 16.	19. 46. 47.
Caput	3.	222. 59. 52.	41. 27. 36.
Humerus sinister	3.	222. 35. 58.	34. 22. 12.
Humerus dexter	3.	238. 20. 23.	39. 30. 53.
Crus sinistrum	3.	231. 8. 40.	34. 53. 53.
In sinistro femore ultima	3.	227. 1. 3.	37. 38. 32.
CANCER			
Brachium Australium	3.	130. 55. 36.	16. 53. 5.
Sub Cauda	3.	120. 28. 48.	9. 59. 48.
CANIS MINOR			
Procyon	1.	111. 20. 38.	5. 56. 42.
In collo	3.	108. 10. 12.	8. 52. 57.
CANES VENATICI			
In annulo armillæ Charo	2.	190. 50. 51.	39. 46. 46.
CASSIOPEA			
Lucida Cathedræ	3.	358. 42. 23.	57. 39. 56.
In pectore, Schedar	3.	6. 1. 38.	55. 3. 44.
In flexura ad Coxas	3.	10. 8. 6.	59. 15. 47.
Dextrum genu	3.	11. 4. 6.	58. 50. 23.
Sinistrum genu	3.	23. 45. 31.	62. 18. 51.
CEPHEVS			
Humerus sinister	3.	311. 59. 54.	62. 27. 16.
Cingulum	3.	321. 18. 1.	69. 23. 23.
In dextro crure	3.	339. 9. 10.	76. 8. 23.
CETVS			
Lucida mandibulæ	2.	40. 4. 38.	3. 1. 39.
Media in ore	3.	37. 20. 29.	2. 1. 8.
CORONA			
Lucida Coronæ	2.	230. 29. 47.	27. 39. 26.
CYGNVS			
Rostrum	3.	289. 58. 9.	27. 26. 25.
Pectus	3.	303. 6. 24.	39. 27. 26.
Cauda	2.	308. 4. 14.	44. 21. 51.
In ancone alæ boreæ	3.	294. 5. 49.	44. 26. 6.
In ancone alæ australis	3.	308. 29. 23.	33. 0. 52.
Carpus alæ australis	3.	313. 50. 34.	29. 21. 23.
In cuspide alæ australis	3.	323. 0. 30.	27. 36. 6.
DELPHINVS			
In Capite	3.	308. 39. 10.	15. 13. 16.
Apex rhombi occidentalis	3.	306. 23. 20.	13. 44. 0.
Mediarum in rhombo borealis	3.	306. 44. 58.	15. 1. 54.
Earundem australis	3.	306. 41. 49.	14. 10. 38.
In Cauda	3.	305. 8. 18.	10. 26. 46.
DRACO			
Ad rostrum	3.	281. 4. 58.	52. 30. 29.
In vertice	2a.	267. 33. 54.	80. 26. 53.
Ante flexum II lucida bor.	3.	250. 43. 14.	68. 18. 24.
Post flexum III secunda	3.	251. 1. 26.	66. 11. 35.
Ante flexum IV prior	3.	249. 5. 43.	62. 10. 16.
Ante flexum IV proxima	3.	239. 15. 8.	59. 18. 41.
In flexura IV	3.	225. 58. 10.	60. 28. 22.
Prima Caudæ	2.	209. 21. 48.	69. 40. 34.
Penultima Caudæ	3.	194. 38. 40.	72. 10. 18.
Ultima Caudæ	3.	169. 41. 44.	70. 48. 34.
EQVVLEVS			
In capite præcedens	3.	303. 35. 50.	6. 11. 3.
GEMINI			
Castor	2.	109. 29. 1.	32. 48. 20.
Pollux	2.	112. 13. 34.	28. 20. 50.
Lucidus pes	2.	93. 32. 29.	16. 21. 21.
Calx Castoris	3.	91. 21. 18.	22. 21. 32.
Suprenum genu Castoris	3.	96. 48. 31.	24. 31. 20.
Dextrum genu Pollucis	3.	108. 9. 12.	20. 55. 1.
HERCULES			
Caput	3.	238. 36. 21.	14. 44. 49.
Sinister humerus	3.	244. 39. 3.	22. 8. 28.
Dexter humerus	3.	253. 38. 58.	25. 30. 20.
Penultima sinistri brachii	3.	249. 32. 59.	19. 48. 26.
In sinistra latere	3.	248. 31. 31.	21. 21. 36.
Ad genicem in clune dextro	3.	268. 27. 26.	34. 21. 18.
In dextro genu	3.	266. 45. 49.	37. 18. 38.
In dextra sura	3.	269. 57. 33.	46. 11. 40.
LEO			
Regulus	1.	148. 30. 47.	13. 18. 24.
Lucida colli	2.	152. 18. 36.	21. 12. 27.
Lucida dorsi	3.	162. 26. 1.	22. 0. 46.
Cauda	2a.	173. 50. 47.	14. 25. 13.
In capite australis	3.	149. 31. 39.	18. 29. 33.
In collo borealis	3.	150. 46. 33.	24. 46. 3.
In collo australis	3.	148. 9. 29.	18. 3. 36.
In coxa vel cændice	3.	162. 2. 30.	16. 33. 29.
LYRA			
Lucida Lyræ	1.	276. 56. 38.	38. 33. 39.
In jugo sequens	3.	282. 11. 32.	32. 43. 36.
ORION			
Humerus sinister	1.	85. 9. 53.	7. 22. 42.
Humerus dexter	2.	77. 24. 5.	6. 2. 30.
PEGASUS			
Os	3.	322. 44. 37.	8. 42. 48.
Lucida colli	3.	337. 0. 36.	9. 29. 20.
Marcab	2.	342. 30. 14.	13. 38. 32.
Scheat	2.	342. 40. 54.	26. 39. 59.
Sinistrum genu	3.	331. 36. 27.	23. 8. 11.
Extrema Ilæ Algenib	2.	309. 52. 24.	13. 43. 51.
PERSEVS			
Fulgens in sinistro latere	2.	46. 17. 11.	43. 29. 27.
Humerus sinister	3.	47. 40. 30.	52. 45. 8.
In flexura lateris	3.	50. 27. 23.	46. 33. 41.
Dextrum genu	3.	54. 39. 52.	39. 12. 32.
Dextra pedis sequens	3.	52. 40. 27.	38. 2. 1.
Caput Medusæ Algol	2.	42. 52. 22.	39. 54. 21.
PISCES			
Nodus Lini	3.	27. 5. 19.	1. 28. 29.
SERPENTARIUS			
Caput	2.	260. 39. 33.	12. 40. 2.
Humeri sinister superior	3.	262. 32. 20.	4. 43. 34.
Humeri dextri inferior	3.	251. 23. 5.	9. 29. 43.
SERPENS			
Lucida in medio collo	2.	230. 47. 38.	1. 19. 36.
In terminis	3.	228. 39. 42.	16. 33. 23.
In eductione colli prima	3.	233. 27. 11.	16. 31. 21.
In eductione colli tertia	3.	230. 29. 42.	11. 21. 33.
Infima colli	3.	229. 18. 39.	5. 20. 33.
TAURUS			
Pallilicium Aldebaran	1.	65. 8. 31.	15. 38. 3.
Cornu boreum	2.	71. 19. 19.	28. 20. 19.
Cornu australium	2.	80. 44. 53.	20. 58. 3.
Oculus bireus	3½	80. 31. 23.	16. 14. 18.
Succularum prima	3.	61. 9. 24.	18. 59. 32.
Succularum seq. bor. præc.	3½	61. 32. 13.	18. 58. 8.
Succularum seq. austr.	3.	60. 19. 13.	15. 21. 37.
Lucida Pleiadum	3.	54. 33. 33.	23. 36. 33.
VIRGO			
Vindemiatrix	3.	202. 13. 37.	10. 25. 40.
In ancone alæ australis	3.	194. 8. 51.	3. 31. 3.
Secunda alæ australis	3.	182. 33. 49.	0. 50. 44.
In dextro latere	3.	181. 1. 41.	1. 27. 13.
In Lyræ s. in angulo	3.	190. 31. 48.	8. 52. 20.
Sub Pectinande	3.	200. 28. 39.	0. 29. 23.
URSA MAIOR			
In latere	2.	163. 44. 16.	60. 13. 16.
In ventre	2.	160. 36. 21.	57. 50. 53.
In dorso	3.	180. 30. 1.	58. 33. 9.
In coxa	3.	174. 33. 3.	55. 13. 46.
Prima caudæ	2.	190. 33. 27.	57. 26. 34.
Media caudæ	2.	198. 18. 34.	56. 42. 1.
Ultima caudæ	2.	204. 21. 31.	54. 21. 8.
In formis sub cauda	2.	190. 50. 52.	39. 46. 46.
In draco in. præced. borea	3.	210. 7. 25.	69. 9. 3.
In draco Nn. seq. et austr.	3.	191. 15. 18.	68. 11. 5.
In armo dextro australi	3.	198. 41. 33.	52. 24. 15.
URSA MINOR			
Polaris	2.	10. 27. 55.	87. 54. 27.
Humerus	2.	222. 58. 24.	73. 15. 27.
In Pectore	3.	230. 29. 47.	72. 48. 7.
VULPECULA CUM ANSERE			
In aure dextra	2. 3.	294. 7. 51.	26. 40. 24.

	DIFFERENTIA Ascensionis rectæ Annorum 30 Anni	DIFFERENTIA Declinationis Annorum 30 Anni
Andromeda.		
Tab. Spec. II. Lit. A	1. 30. 18. A	0. 46. 2. A
Lit. B	1. 31. 14. A	0. 44. 2. A
Lit. C	1. 31. 14. A	0. 44. 2. A
Lit. D	1. 31. 14. A	0. 44. 2. A
Lit. E	1. 31. 14. A	0. 44. 2. A
Antinous.		
Tab. V. Lit. B	1. 31. 36. A	0. 49. 43. A
Aquila.		
Tab. V. Lit. A	1. 30. 28. A	0. 44. 2. A
Lit. B	1. 32. 36. A	0. 43. 26. A
Lit. C	1. 32. 36. A	0. 43. 26. A
Aries.		
Tab. II. Lit. A	1. 28. 36. A	0. 30. 28. A
Lit. B	1. 28. 0. A	0. 29. 36. A
Auriga.		
Tab. I. Lit. A	1. 22. 12. A	0. 6. 37. A
Tab. III. Lit. B	1. 27. 36. A	0. 6. 46. A
Lit. C	1. 27. 36. A	0. 6. 46. A
Lit. D	1. 27. 36. A	0. 6. 46. A
Bootes.		
Tab. IV. Lit. A	1. 6. 30. A	0. 42. 39. A
Lit. B	1. 4. 48. A	0. 36. 26. A
Lit. C	1. 4. 48. A	0. 36. 26. A
Tab. I. Lit. D	1. 4. 48. A	0. 36. 26. A
Tab. V. Lit. E	1. 4. 48. A	0. 36. 26. A
Tab. IV. Lit. F	1. 4. 48. A	0. 36. 26. A
Lit. G	1. 4. 48. A	0. 36. 26. A
Lit. S	1. 4. 48. A	0. 36. 26. A
Cancer.		
Tab. III. Lit. A	1. 22. 6. A	0. 52. 13. A
Lit. B	1. 21. 24. A	0. 49. 43. A
Canis minor.		
Tab. III. Lit. A	1. 8. 6. A	0. 49. 38. A
Lit. B	1. 8. 24. A	0. 49. 39. A
Canes Venatici.		
Tab. IV. Lit. A	1. 28. 12. A	0. 48. 31. A
Cassiopea.		
Tab. I. Lit. A	1. 43. 49. A	0. 46. 34. A
Lit. B	1. 42. 6. A	0. 46. 23. A
Lit. C	1. 43. 18. A	0. 46. 23. A
Lit. D	1. 43. 18. A	0. 46. 30. A
Cepheus.		
Tab. I. Lit. A	1. 39. 54. A	0. 42. 32. A
Lit. B	1. 42. 6. A	0. 46. 23. A
Lit. C	1. 42. 6. A	0. 46. 23. A
Cetus.		
Tab. II. Lit. A	1. 33. 18. A	0. 41. 20. A
Lit. B	1. 33. 18. A	0. 41. 20. A
Corona.		
Tab. V. Lit. A	1. 6. 42. A	0. 36. 20. A
Cygnus.		
Tab. V. Lit. A	1. 7. 24. A	0. 36. 44. A
Lit. C	1. 3. 46. A	0. 32. 37. A
Tab. I. Lit. D	1. 3. 31. A	0. 31. 6. A
Lit. C	1. 4. 48. A	0. 32. 37. A
Tab. V. Lit. E	1. 4. 48. A	0. 36. 26. A
Tab. II. Lit. G	1. 6. 31. A	0. 36. 43. A
Lit. O	1. 6. 18. A	0. 40. 48. A
Delphinus.		
Tab. V. Lit. A	1. 3. 12. A	0. 42. 12. A
Lit. B	1. 6. 42. A	0. 44. 30. A
Lit. C	1. 3. 24. A	0. 42. 30. A
Lit. D	1. 3. 24. A	0. 42. 37. A
Lit. C	1. 29. 30. A	0. 43. 33. A
Draco.		
Tab. I. Lit. A	1. 23. 0. A	0. 20. 30. A
Lit. B	1. 31. 18. A	0. 22. 8. A
Lit. C	0. 3. 2. S	0. 0. 30. S
Lit. D	0. 1. 0. A	0. 0. 0. A
Lit. E	1. 37. 24. A	0. 28. 33. A
Lit. F	1. 3. 6. A	0. 18. 33. A
Lit. G	1. 42. 36. S	0. 36. 56. S
Lit. H	1. 2. 36. A	0. 24. 28. A
Lit. I	1. 32. 6. A	0. 24. 28. A
Lit. K	1. 8. 0. A	0. 22. 0. A
Equuleus.		
Tab. III. Lit. A	1. 30. 24. A	0. 46. 1. A
Gemini.		
Tab. III. Lit. A	1. 49. 6. A	0. 5. 8. S
Lit. B	1. 49. 38. A	0. 26. 24. A
Lit. C	1. 46. 38. A	0. 22. 8. A
Lit. D	1. 47. 30. A	0. 22. 8. A
Lit. E	1. 47. 24. A	0. 26. 26. A
Hercules.		
Tab. V. Lit. A	1. 58. 30. A	0. 49. 31. A
Lit. B	1. 56. 12. A	0. 49. 13. A
Lit. C	1. 52. 48. A	0. 37. 43. A
Lit. D	1. 52. 36. A	0. 40. 30. A
Lit. E	1. 53. 30. A	0. 40. 30. A
Lit. F	1. 53. 24. A	0. 40. 30. A
Lit. I	1. 28. 6. A	0. 32. 48. A
Tab. I. Lit. K	1. 28. 24. A	0. 28. 28. A
Leo.		
Tab. IV. Lit. A	1. 8. 30. A	0. 49. 30. A
Lit. B	1. 8. 24. A	0. 50. 20. S
Lit. C	1. 8. 36. A	0. 50. 20. S
Lit. D	1. 7. 30. A	0. 41. 7. A
Lit. E	1. 8. 42. A	0. 49. 30. A
Lit. F	1. 8. 33. A	0. 49. 30. A
Lit. G	1. 8. 22. A	0. 50. 20. S
Lit. K	1. 8. 3. A	0. 48. 23. A
Lyra.		
Tab. V. Lit. A	1. 2. 18. A	0. 30. 30. A
Lit. C	1. 0. 42. A	0. 34. 4. A
Orion.		
Tab. III. Lit. A	1. 11. 36. A	0. 29. 26. A
Lit. B	1. 7. 24. A	0. 28. 38. A
Pegasus.		
Tab. II. Lit. A	1. 27. 42. A	0. 44. 46. A
Lit. B	1. 29. 36. A	0. 43. 20. A
Lit. C	1. 29. 6. A	0. 43. 20. A
Lit. D	1. 27. 42. A	0. 43. 20. A
Lit. C	1. 9. 54. A	0. 24. 24. A
Lit. E	1. 26. 24. A	0. 36. 38. A
Perseus.		
Tab. I. Lit. A	1. 10. 32. A	0. 3. 28. A
Lit. B	1. 10. 38. A	0. 3. 39. A
Lit. C	1. 10. 30. A	0. 3. 39. A
Lit. D	1. 10. 0. A	0. 3. 24. A
Tab. III. Lit. C	1. 9. 24. A	0. 24. 39. A
Tab. I. Lit. F	1. 9. 39. A	0. 27. 39. A
Pisces.		
Tab. II. Lit. A	1. 8. 8. A	0. 46. 23. A
Serpentarius.		
Tab. IV. Lit. A	1. 7. 0. S	0. 42. 3. A
Lit. B	1. 7. 29. S	0. 42. 39. A
Lit. D	1. 7. 21. S	0. 43. 7. A
Serpens.		
Tab. V. Lit. A	1. 9. 5. S	0. 44. 33. A
Lit. B	1. 6. 35. S	0. 40. 35. A
Lit. C	1. 7. 14. S	0. 43. 39. A
Lit. K	1. 7. 30. S	0. 43. 39. A
Taurus.		
Tab. III. Lit. A	1. 38. 48. A	0. 53. 33. A
Lit. B	1. 33. 3. A	0. 51. 52. A
Lit. C	1. 32. 54. A	0. 52. 31. A
Lit. D	1. 34. 48. A	0. 52. 31. A
Lit. E	1. 34. 30. A	0. 52. 31. A
Lit. F	1. 34. 30. A	0. 52. 31. A
Lit. G	1. 34. 30. A	0. 52. 31. A
Lit. Q	1. 33. 24. A	0. 53. 39. A
Virgo.		
Tab. IV. Lit. B	1. 37. 12. A	0. 49. 43. A
Lit. C	1. 37. 36. A	0. 46. 30. A
Lit. D	1. 37. 48. A	0. 46. 30. A
Lit. E	1. 37. 42. A	0. 46. 30. A
Lit. F	1. 37. 42. A	0. 46. 36. A
Lit. Z	1. 43. 24. A	0. 46. 32. A
Ursa major.		
Tab. I. Lit. A	1. 33. 36. A	0. 39. 38. A
Lit. B	1. 30. 24. A	0. 38. 30. A
Lit. C	1. 28. 18. A	0. 36. 34. A
Lit. D	1. 28. 0. A	0. 40. 30. A
Lit. E	1. 6. 54. A	0. 37. 42. A
Lit. F	1. 6. 36. A	0. 37. 42. A
Lit. G	1. 6. 54. A	0. 39. 24. A
Tab. IV. Lit. A	1. 31. 12. A	0. 43. 31. A
Tab. I. Lit. I	1. 30. 24. A	0. 38. 4. A
Lit. K	1. 30. 6. A	0. 33. 4. A
Lit. L	1. 30. 18. A	0. 38. 28. A
Ursa minor.		
Tab. I. Lit. A	1. 42. 36. A	0. 56. 23. A
Lit. B	1. 0. 24. S	0. 6. 28. S
Lit. C	1. 0. 18. S	0. 9. 22. S
Vulpecula cum Ansere.		
Tab. V. Lit. C	1. 6. 33. A	0. 31. 29. A

	DIFFERENTIA Ascensionis rectæ Annorum 30 Anni	DIFFERENTIA Declinationis Annorum 30 Anni
Andromeda.		
Tab. Spec. II. Lit. A	1. 30. 18. A	0. 46. 2. A
Lit. B	1. 31. 14. A	0. 44. 2. A
Lit. C	1. 31. 14. A	0. 44. 2. A
Lit. D	1. 31. 14. A	0. 44. 2. A
Lit. E	1. 31. 14. A	0. 44. 2. A
Antinous.		
Tab. V. Lit. B	1. 31. 36. A	0. 49. 43. A
Aquila.		
Tab. V. Lit. A	1. 30. 28. A	0. 44. 2. A
Lit. B	1. 32. 36. A	0. 43. 26. A
Lit. C	1. 32. 36. A	0. 43. 26. A
Aries.		
Tab. II. Lit. A	1. 28. 36. A	0. 30. 28. A
Lit. B	1. 28. 0. A	0. 29. 36. A
Auriga.		
Tab. I. Lit. A	1. 22. 12. A	0. 6. 37. A
Tab. III. Lit. B	1. 27. 36. A	0. 6. 46. A
Lit. C	1. 27. 36. A	0. 6. 46. A
Lit. D	1. 27. 36. A	0. 6. 46. A
Bootes.		
Tab. IV. Lit. A	1. 6. 30. A	0. 42. 39. A
Lit. B	1. 4. 48. A	0. 36. 26. A
Lit. C	1. 4. 48. A	0. 36. 26. A
Tab. I. Lit. D	1. 4. 48. A	0. 36. 26. A
Tab. V. Lit. E	1. 4. 48. A	0. 36. 26. A
Tab. IV. Lit. F	1. 4. 48. A	0. 36. 26. A
Lit. G	1. 4. 48. A	0. 36. 26. A
Lit. S	1. 4. 48. A	0. 36. 26. A
Cancer.		
Tab. III. Lit. A	1. 22. 6. A	0. 52. 13. A
Lit. B	1. 21. 24. A	0. 49. 43. A
Canis minor.		
Tab. III. Lit. A	1. 8. 6. A	0. 49. 38. A
Lit. B	1. 8. 24. A	0. 49. 39. A
Canes Venatici.		
Tab. IV. Lit. A	1. 28. 12. A	0. 48. 31. A
Cassiopea.		
Tab. I. Lit. A	1. 43. 49. A	0. 46. 34. A
Lit. B	1. 42. 6. A	0. 46. 23. A
Lit. C	1. 43. 18. A	0. 46. 23. A
Lit. D	1. 43. 18. A	0. 46. 30. A
Cepheus.		
Tab. I. Lit. A	1. 39. 54. A	0. 42. 32. A
Lit. B	1. 42. 6. A	0. 46. 23. A
Lit. C	1. 42. 6. A	0. 46. 23. A
Cetus.		
Tab. II. Lit. A	1. 33. 18. A	0. 41. 20. A
Lit. B	1. 33. 18. A	0. 41. 20. A
Corona.		
Tab. V. Lit. A	1. 6. 42. A	0. 36. 20. A
Cygnus.		
Tab. V. Lit. A	1. 7. 24. A	0. 36. 44. A
Lit. C	1. 3. 46. A	0. 32. 37. A
Tab. I. Lit. D	1. 3. 31. A	0. 31. 6. A
Lit. C	1. 4. 48. A	0. 32. 37. A
Tab. V. Lit. E	1. 4. 48. A	0. 36. 26. A
Tab. II. Lit. G	1. 6. 31. A	0. 36. 43. A
Lit. O	1. 6. 18. A	0. 40. 48. A
Delphinus.		
Tab. V. Lit. A	1. 3. 12. A	0. 42. 12. A
Lit. B	1. 6. 42. A	0. 44. 30. A
Lit. C	1. 3. 24. A	0. 42. 30. A
Lit. D	1. 3. 24. A	0. 42. 37. A
Lit. C	1. 29. 30. A	0. 43. 33. A
Draco.		
Tab. I. Lit. A	1. 23. 0. A	0. 20. 30. A
Lit. B	1. 31. 18. A	0. 22. 8. A
Lit. C	0. 3. 2. S	0. 0. 30. S
Lit. D	0. 1. 0. A	0. 0. 0. A
Lit. E	1. 37. 24. A	0. 28. 33. A
Lit. F	1. 3. 6. A	0. 18. 33. A
Lit. G	1. 42. 36. S	0. 36. 56. S
Lit. H	1. 2. 36. A	0. 24. 28. A
Lit. I	1. 32. 6. A	0. 24. 28. A
Lit. K	1. 8. 0. A	0. 22. 0. A
Equuleus.		
Tab. III. Lit. A	1. 30. 24. A	0. 46. 1. A
Gemini.		
Tab. III. Lit. A	1. 49. 6. A	0. 5. 8. S
Lit. B	1. 49. 38. A	0. 26. 24. A
Lit. C	1. 46. 38. A	0. 22. 8. A
Lit. D	1. 47. 30. A	0. 22. 8. A
Lit. E	1. 47. 24. A	0. 26. 26. A
Hercules.		
Tab. V. Lit. A	1. 58. 30. A	0. 49. 31. A
Lit. B	1. 56. 12. A	0. 49. 13. A
Lit. C	1. 52. 48. A	0. 37. 43. A
Lit. D	1. 52. 36. A	0. 40. 30. A
Lit. E	1. 53. 30. A	0. 40. 30. A
Lit. F	1. 53. 24. A	0. 40. 30. A
Lit. I	1. 28. 6. A	0. 32. 48. A
Tab. I. Lit. K	1. 28. 24. A	0. 28. 28. A
Leo.		
Tab. IV. Lit. A	1. 8. 30. A	0. 49. 30. A
Lit. B	1. 8. 24. A	0. 50. 20. S
Lit. C	1. 8. 36. A	0. 50. 20. S
Lit. D	1. 7. 30. A	0. 41. 7. A
Lit. E	1. 8. 42. A	0. 49. 30. A
Lit. F	1. 8. 33. A	0. 49. 30. A
Lit. G	1. 8. 22. A	0. 50. 20. S
Lit. K	1. 8. 3. A	0. 48. 23. A
Lyra.		
Tab. V. Lit. A	1. 2. 18. A	0. 30. 30. A
Lit. C	1. 0. 42. A	0. 34. 4. A
Orion.		
Tab. III. Lit. A	1. 11. 36. A	0. 29. 26. A
Lit. B	1. 7. 24. A	0. 28. 38. A
Pegasus.		
Tab. II. Lit. A	1. 27. 42. A	0. 44. 46. A
Lit. B	1. 29. 36. A	0. 43. 20. A
Lit. C	1. 29. 6. A	0. 43. 20. A
Lit. D	1. 27. 42. A	0. 43. 20. A
Lit. C	1. 9. 54. A	0. 24. 24. A
Lit. E	1. 26. 24. A	0. 36. 38. A
Perseus.		
Tab. I. Lit. A	1. 10. 32. A	0. 3. 28. A
Lit. B	1. 10. 38. A	0. 3. 39. A
Lit. C	1. 10. 30. A	0. 3. 39. A
Lit. D	1. 10. 0. A	0. 3. 24. A
Tab. III. Lit. C	1. 9. 24. A	0. 24. 39. A
Tab. I. Lit. F	1. 9. 39. A	0. 27. 39. A
Pisces.		
Tab. II. Lit. A	1. 8. 8. A	0. 46. 23. A
Serpentarius.		
Tab. IV. Lit. A	1. 7. 0. S	0. 42. 3. A
Lit. B	1. 7. 29. S	0. 42. 39. A
Lit. D	1. 7. 21. S	0. 43. 7. A
Serpens.		
Tab. V. Lit. A	1. 9. 5. S	0. 44. 33. A
Lit. B	1. 6. 35. S	0. 40. 35. A
Lit. C	1. 7. 14. S	0. 43. 39. A
Lit. K	1. 7. 30. S	0. 43. 39. A
Taurus.		
Tab. III. Lit. A	1. 38. 48. A	0. 53. 33. A
Lit. B	1. 33. 3. A	0. 51. 52. A
Lit. C	1. 32. 54. A	0. 52. 31. A
Lit. D	1. 34. 48. A	0. 52. 31. A
Lit. E	1. 34. 30. A	0. 52. 31. A
Lit. F	1. 34. 30. A	0. 52. 31. A
Lit. G	1. 34. 30. A	0. 52. 31. A
Lit. Q	1. 33. 24. A	0. 53. 39. A
Virgo.		
Tab. IV. Lit. B	1. 37. 12. A	0. 49. 43. A
Lit. C	1. 37. 36. A	0. 46. 30. A
Lit. D	1. 37. 48. A	0. 46. 30. A
Lit. E	1. 37. 42. A	0. 46. 30. A
Lit. F	1. 37. 42. A	0. 46. 36. A
Lit. Z	1. 43. 24. A	0. 46. 32. A
Ursa major.		
Tab. I. Lit. A	1. 33. 36. A	0. 39. 38. A
Lit. B	1. 30. 24. A	0. 38. 30. A
Lit. C	1. 28. 18. A	0. 36. 34. A
Lit. D	1. 28. 0. A	0. 40. 30. A
Lit. E	1. 6. 54. A	0. 37. 42. A
Lit. F	1. 6. 36. A	0. 37. 42. A
Lit. G	1. 6. 54. A	0. 39. 24. A
Tab. IV. Lit. A	1. 31. 12. A	0. 43. 31. A
Tab. I. Lit. I	1. 30. 24. A	0. 38. 4. A
Lit. K	1. 30. 6. A	0. 33. 4. A
Lit. L	1. 30. 18. A	0. 38. 28. A
Ursa minor.		
Tab. I. Lit. A	1. 42. 36. A	0. 56. 23. A
Lit. B	1. 0. 24. S	0. 6. 28. S
Lit. C	1. 0. 18. S	0. 9. 22. S
Vulpecula cum Ansere.		
Tab. V. Lit. C	1. 6. 33. A	0. 31. 29. A

HEMISPHÆRIV… OELI AVSTRALE,

in quo loca Stellarum fixarum secundum Æquatorem, per A… hempe rectas et Declinationes ad annum Christi 1730 completū sistuntur

à IOH. GABRIELE DOPPELMAJERO Prof. Publ. Acad… olchino-Carol. Nat. Curios. et Regiæ Societatis Borus. Sodali,

operâ IOH. BAPT. HO… s. Maj. Geogr. Norimbergæ. Cum Privilegio S. C. M.

NOMINA FIXARVM 1.2. et tertii honoris	Mag. nitud.	Ascensio recta ad annum completum	Declinatio ad eundem annum completum
ANTINOVS			
Dextrum brachium Tych. man.	3 exter.	290.23.32.	1.33.24.
In sinistro pede sequens	3.	282.29.36.	5.13.47.
AQVARIVS			
Humerus sinister	3.	327.59.36.	1.34.22.
Humerus dexter	3.	329.20.36.	6.41.23.
In sinistra Tibia. Scheat	3.	340.3.21.	17.9.57.
Fomahand	3.	340.37.38.	30.27.40.
CANIS MAJOR			
Sirius	1.	98.22.41.	16.38.1.
Extrema dextri pedis prioris	2.	92.47.38.	32.47.56.
Ad dextram aurem	3.	102.37.23.	29.12.38.
In Tergo	2.	108.26.9.	23.56.0.
Inter Femora	2.	102.1.32.	28.33.31.
In Cauda	2.	108.22.44.	28.44.20.
Extrema pedis posteriori	2.	92.38.36.	29.55.36.
CAPRICORNVS			
Inferorum borealis media	3.	300.49.44.	13.17.20.
In eorum australi	3.	307.27.36.	16.33.16.
Caudæ præcedens	3.	323.26.12.	17.48.26.
Caudæ sequens	3.	323.1.22.	17.40.30.
CETVS			
Præcedens ad genam	3.	36.24.22.	0.38.19.
In dorso vrientalis	3.	17.39.20.	9.32.46.
In dorso occidentalis	3.	13.49.18.	11.34.31.
Borealis Caudæ	3.	1.29.17.	10.16.34.
Lucida Caudæ australis	2.	7.31.34.	19.29.14.
In quadro Pectoris seq. borealis	3.	36.42.30.	12.32.40.
In quadro Pectoris seq. austr.	3.	37.52.36.	14.50.38.
Borea et suprema Ventris seq.	3.	24.32.28.	11.17.30.
Ventris tertia, alias media	3.	22.56.18.	17.18.19.
CORVVS			
Ala præcedens	3.	178.03.30.	19.09.41.
Ala sequens	3.	184.0.24.	14.57.33.
In pectore	3.	185.4.24.	21.51.15.
ERIDANVS			
Clara in principio	3.	73.42.30.	3.25.36.
In II. flexu infima	3.	56.22.52.	14.34.54.
A II. flexu secunda	3.	52.38.38.	10.51.49.
tertia	3.	50.7.31.	10.22.20.
quarta	3.	43.44.30.	9.49.23.
In III flexu	3.	40.51.38.	9.50.47.
HYDRA			
Cor	1.	198.36.42.	7.28.53.
LEPVS			
In medio corpore	3.	80.15.34.	18.0.17.
In Armo dextro	3.	79.12.44.	20.56.33.
LIBRA			
Lanx australis	2.	229.3.45.	14.30.56.
Centrum Libræ	2.	229.34.56.	8.20.17.
Sub lancibus præcedens	3.	224.12.36.	18.42.55.
NAVIS			
In clypeo super. præcedens	3.	114.30.22.	24.10.14.
In supr. puppi clariori et præc.	3.	119.1.8.	25.30.29.
In Aplustri	3.	119.24.43.	21.7.34.
ORION			
Rigel	1.	75.28.2.	8.30.15.
Pes sinister	3.	83.46.51.	9.46.9.
Cinguli prima	2.	79.36.31.	0.29.36.
Cinguli secunda vel med.	2.	80.30.7.	1.22.17.
Cinguli ultima	2.	81.29.25.	2.4.33.
In manubrio ensis	3.	77.46.4.	2.38.11.
Infima in ense	3.	80.36.23.	6.6.43.
Media in ense	3.	80.31.31.	5.33.34.
SAGITTARIVS			
Dextra manus	3.	271.2.38.	29.47.10.
In dextro latere	3.	267.38.23.	29.59.8.
SCORPIVS			
Cor	1.	243.12.33.	25.44.45.
Suprema frontis	2.	237.26.30.	38.59.40.
Media frontis	3.	236.6.28.	27.36.24.
Infima frontis	3.	235.29.32.	25.24.59.
In chela australi	3.	222.4.39.	24.29.3.
SERPENTARIVS			
In manu dextra boreali	3.	240.3.30.	2.56.39.
In dextro genu	3.	248.36.18.	9.58.42.
In sinistro femore	3.	253.43.12.	20.19.28.
SERPENS			
Prima Caudæ	3.	266.36.10.	3.36.48.
Penultima Caudæ	3.	271.30.4.	2.54.14.
Ultima Caudæ	3.	280.43.57.	3.54.20.
VIRGO			
Spica	1	196.48.31.	9.43.0.

Denique notetur, quod loca stellarum fixarum, quæ hic secundum Æquatoris ductum per Ascensiones rectas et Declinationes geometrice definitas, spatiis inter se distent cum observatis prorsus similibus, nulla enim Projectionis, quo illæ, ut inter se revera apparent, hic etiam sistuntur, habita fuit ratio.

	DIFFERENTIA Ascensionis rectæ Annorū 30	Anni 3.	Declinationis Annorū 30	Anni 3.
Antinous.	° ′ ″	° ′ ″	° ′ ″	° ′ ″
Tab. fec. N. Lit. A	1.31.24. A	0.37.8. A	2.38.48. S	0.55.5. S
Lit. C	0.8.0. A	0.2.48. A	0.44.42. S	0.28.5. S
Aquarius.				
Tab. II. Lit. A	1.40.48. A	0.46.59. A	2.52.24. S	17.24.5. S
Lit. B	0.2.6. A	0.48.33. A	2.33.28. S	16.20.5. S
Lit. V	0.2.36. A	0.48.36. A	3.20.6. S	19.32.5. S
Lit. q	0.27.30. A	0.50.36. A	3.20.28. S	19.2.5. S
Canis Major.				
Tab. III. Lit. A	6.30.36. A	0.42.6. A	0.28.42. A	1.52.4. A
Lit. B	6.33.36. A	0.42.20. A	0.9.24. A	0.36.4. A
Lit. C	6.32.48. A	0.41.31. A	0.44.42. A	0.28.4. A
Lit. D	6.31.6. A	0.41.7. A	0.49.18. A	0.36.4. A
Lit. E	6.38.24. A	0.48.30. A	0.43.0. A	0.6.4. A
Lit. F	6.1.12. A	0.36.7. A	0.3.48. A	0.13.4. A
Lit. G	6.21.24. A	0.38.31. A	0.6.24. A	0.38.4. A
Capricornus.				
Tab. V. Lit. A	8.23.21. A	0.30.29. A	2.44.0. S	20.38.5. S
Lit. B	8.29.38. A	0.31.21. A	2.43.28. S	20.31.5. S
Tab. II. Lit. C	8.26.54. A	0.30.41. A	2.37.54. S	23.47.5. S
Lit. D	8.25.0. A	0.30.30. A	2.47.54. S	26.33.5. S
Cetus.				
Tab. II. Lit. C	1.43.36. A	0.46.21. A	2.43.42. S	26.22.5. S
Lit. D	1.38.36. A	0.45.34. A	3.13.24. S	29.20.5. S
Lit. L	1.36.36. A	0.44.40. A	3.17.36. S	29.46.5. S
Lit. E	8.9.6. A	0.46.28. A	3.21.42. S	22.26.5. S
Lit. G	1.47.18. A	0.46.48. A	3.20.36. S	20.22.5. S
Lit. P	1.38.22. A	0.43.29. A	2.43.6. S	26.29.5. S
Lit. Q	1.33.12. A	0.43.29. A	2.43.0. S	26.6.5. S
Lit. R	1.28.42. A	0.43.12. A	3.4.42. S	28.28.5. S
Lit. S	1.23.18. A	0.43.20. A	3.8.36. S	28.52.5. S
Corvus.				
Tab. IV. Lit. A	3.38.42. A	0.29.12. A	3.23.0. A	20.28.4. A
Lit. B	3.30.12. A	0.47.1. A	3.23.48. A	20.11.4. A
Lit. C	2.54.24. A	0.47.24. A	3.22.12. A	20.13.4. A
Eridanus.				
Tab. III. Lit. A	1.33.36. A	0.40.23. A	11.6.5. S	6.7.5. S
Lit. L	1.1.42. A	0.42.36. A	1.58.30. S	11.33.5. S
Lit. N	1.16.30. A	0.43.33. A	2.2.42. S	12.36.5. S
Lit. O	1.16.48. A	0.43.41. A	2.11.6. S	13.7.5. S
Lit. P	1.11.18. A	0.43.46. A	2.11.48. S	14.12.5. S
Tab. II. Lit. R	1.16.42. A	0.43.40. A	2.13.24. S	16.20.5. S
Hydra.				
Tab. IV. Lit. A	1.28.54. A	0.44.33. A	2.30.24. A	5.8.4. A
Lepus.				
Tab. III. Lit. A	6.41.30. A	0.40.9. A	0.33.0. S	3.30.5. S
Lit. B	6.30.12. A	0.39.1. A	0.38.42. S	3.32.5. S
Libra.				
Tab. IV. Lit. A	8.20.18. A	0.50.2. A	2.38.18. A	25.50.4. A
Tab. V. Lit. B	8.7.0. A	0.48.42. A	2.22.18. A	24.16.4. A
Tab. IV. Lit. L	8.33.36. A	0.51.30. A	2.39.42. A	23.12.4. A
Navis.				
Tab. III. Lit. A	6.23.30. A	0.38.21. A	1.23.24. A	8.20.4. A
Lit. B	6.29.36. A	0.38.36. A	1.37.54. A	9.47.4. A
Lit. C	7.8.30. A	0.28.30. A	1.39.6. A	9.53.4. A
Orion.				
Tab. III. Lit. C	7.29.36. A	0.42.42. A	0.52.54. S	5.11.5. S
Lit. D	7.11.42. A	0.43.30. A	0.13.0. S	2.18.5. S
Lit. E	7.44.48. A	0.46.24. A	0.37.36. S	3.46.5. S
Lit. F	7.32.42. A	0.46.30. A	0.33.54. S	3.23.5. S
Lit. G	7.39.6. A	0.46.39. A	0.29.36. S	2.58.5. S
Lit. M	7.37.18. A	0.43.44. A	0.43.48. S	4.13.5. S
Lit. I	7.29.6. A	0.44.31. A	0.34.18. S	3.26.5. S
Lit. K	7.27.12. A	0.44.43. A	0.34.18. S	3.26.5. S
Sagittarius.				
Tab. V. Lit. C	6.53.0. A	0.41.6. A	0.1.6. S	0.18.5. S
Lit. I	9.41.24. A	0.46.8. A	0.38.12. S	3.32.5. S
Scorpius.				
Tab. V. Lit. A	9.12.0. A	0.38.12. A	1.32.30. A	9.25.4. A
Lit. B	8.44.42. A	0.42.29. A	1.50.0. A	11.0.4. A
Lit. C	8.33.12. A	0.43.29. A	1.53.54. A	11.23.4. A
Lit. D	9.5.0. A	0.44.30. A	1.55.42. A	11.34.4. A
Tab. IV. Lit. G	8.46.30. A	0.42.29. A	2.31.0. A	10.6.4. A
Serpentarius.				
Tab. V. Lit. C	1.24.42. A	0.47.28. A	1.42.0. A	10.12.4. A
Lit. G	8.28.42. A	0.49.42. A	1.24.42. A	8.28.4. A
Lit. H	8.29.36. A	0.51.33. A	0.59.36. A	8.57.4. A
Serpens.				
Tab. V. Lit. O	1.29.18. A	0.47.36. A	0.13.0. A	3.58.4. A
Lit. P	1.33.0. A	0.47.36. A	0.5.36.	0.33.5. S
Lit. Q	1.33.6. A	0.49.29. A	0.26.36. A	3.30.4. A
Virgo.				
Tab. IV. Lit. A	1.36.24. A	0.47.31. A	3.33.36. A	29.23.4. A

Pro fixe Ascensione recta et Declinatione ad tempus, quod annum 1730 completum sequitur, obtinenda, differentiam illarum proportionatam et Ascensioni rectæ et Declinationi hic exhibitis, vel, prout, Sigma A. et S. apposita indicant, adde vel subtrahe, si vero hoc dictum annum præcedit, contrarios adhibe titulos.

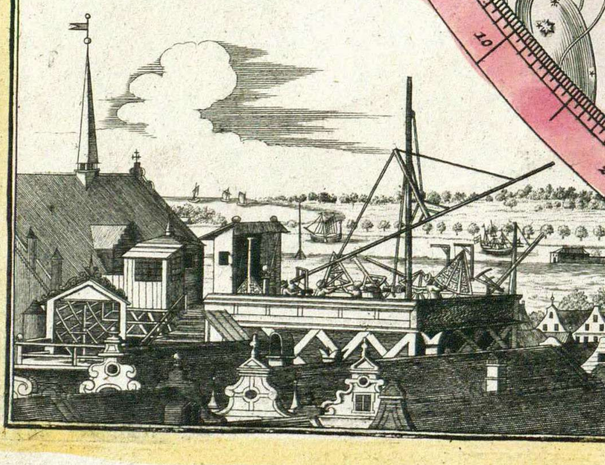
HEMISPHÆRIUM

in quo Fixarum loca secundum Ecliptiæ ductum ad annum 1730 completum exhibentur à
operâ IOH. BAPTISTÆ HOMANNI

OBSERVATORIUM TYCHONICUM.
Arx hæc Uraniburgium cum adjacente Stellæburgo regnante Prin. Daniæ Rege Friderico II a Nob. Viro Tychone Brahe de Knudstrup post annum 1576 ædificata in Hvenna Insula.

STELLÆ HEMISPHÆRII BOREALIS
Asterismi boreales.

Magnitud.	primæ	secundæ	tertiæ	quartæ	quintæ	sextæ	nebulosæ	Summa
Ursa minor.	0.	2.	1.	3.	3.	3.	0.	12
Ursa major.	0.	7.	4.	16.	22	23.	1 Sq.	73
Draco.	0.	1.	11.	13.	11.	4.	0.	40
Cepheus.	0.	0.	3.	9.	13.	23	1 Sq.	52
Canes venatici.	0.	1.	0.	3.	8.	11.	0.	23
Boötes cum M. Mæn.	1.	0.	7.	14.	17.	18.	1 Sq.	58.
Corona borealis.	0.	1.	0.	4.	3.	0.	0.	8.
Hercules.	0.	0.	8.	16.	14.	6.	1 Sq.	45.
Cerberus.	0.	0.	0.	1.	3.	0.	0.	4.
Lyra.	1.	0.	1.	1.	0.	0.	0.	13.
Cygnus.	0.	1.	7.	16.	16.	5.	0.	45.
Vulpec. cum Asterismo.	0.	1.	0.	1.	10.	15.	0.	27.
Lacerta. & Stellio.	0.	0.	0.	0.	6.	4.	0.	10.
Cassiopea.	0.	0.	5.	7.	6.	15.	1 Sq. 1 Neb.	38.
Perseus.	0.	2.	4.	11.	13.	16.	0.	46.
Auriga.	1.	1.	2.	6.	17.	13.	0.	40.
Serpentarius.	0.	1.	6.	17.	12.	6.	1 Sq. 1 Neb.	44.
Serpens.	0.	1.	7.	6.	3.	3.	0.	20.
Campus, per duas.	0.	0.	0.	4.	12.	13.	0.	32.
Scutum, Sobiescian.	0.	0.	0.	2.	4.	1.	0.	7.
Sagitta.	0.	0.	0.	4.	0.	1.	0.	5.
Aquila.	1.	0.	2.	5.	4.	11.	0.	23
Antinous.	0.	0.	3.	6.	6.	4.	0.	19.
Delphinus.	0.	0.	4.	1.	2.	7.	0.	14.
Equuleus.	0.	0.	1.	3.	1.	1.	0.	6.
Pegasus.	0.	3.	3.	7.	7.	17.	0.	37.
Andromeda.	0.	3.	2.	10.	10.	20.	1 Sq.	46.
Triang. majus.	0.	0.	0.	3.	2.	4.	0.	9.
Triang. minus.	0.	0.	0.	0.	0.	3.	0.	3.
Coma Berenices.	0.	0.	0.	4.	11.	6.	1 Sq.	21
Triangul. s. Tygris.	0.	0.	1.	0.	8.	10.	0.	19.
Leo minor.	0.	0.	3.	3.	2.	10.	0.	18.
Summa.	4.	23.	64.	146.	184.	196.	10.	634.



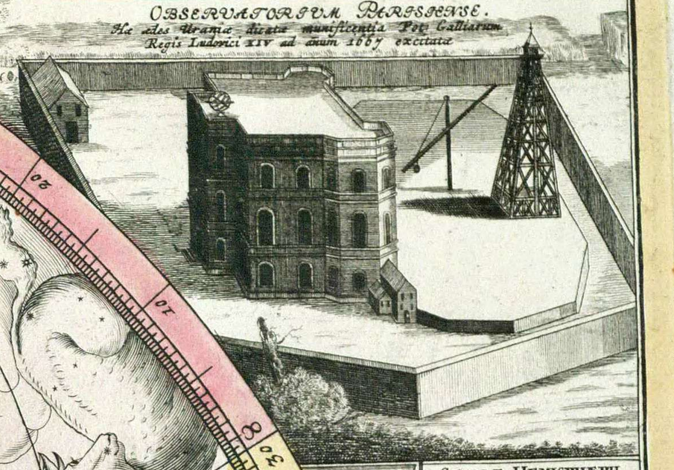
OBSERVATORIUM HEVELIANUM.
Hoc Johannes Hevelius Consul Dantisci circa annum 1650 erigi curavit.

COELI BOREALE

18

IOH. GABRIELE DOPPELMAIERO Mathem. P.P. Acad. Imp. Leop. Car. Nat. Curios. nec non Reg. Scient. Acad. Boruss. Socio
Stæ. Cæs. Maj. Geogra. Norimbergæ. Cum Privilegio Sac. Cæs. Majestatis.

OBSERVATORIUM PARISIENSE.
Hic ædes Uraniæ dirutæ munificentia Pot. Galliarum Regis Ludovici XIV ad annum 1667 excitata



STELLÆ HEMISPHÆRII BOREALIS
Asterismi Zodiaci dimidii versus Boream.

Magnitud.	primæ	secundæ	tertiæ	quartæ	quintæ	sextæ	nebulosæ	Summa
Aries.	0.	1.	2.	4.	6.	11.	0.	24
Taurus.	0.	1.	1.	1.	10.	4.	0.	17.
Gemini.	0.	2.	1.	3.	6.	10.	0.	22.
Cancer.	0.	0.	0.	1.	3.	7.	1 Sq. 1 Neb.	13.
Leo.	2.	1.	5.	6.	5.	10.	0.	29.
Virgo.	0.	0.	6.	6.	14.	14.	0.	40.
Libra.	0.	2.	0.	4.	5.	5.	1 Sq. 1 Neb.	18.
Scorpius.	0.	1.	0.	2.	2.	1.	1 Sq. 1 Neb.	7.
Sagittar.	0.	0.	0.	5.	1.	6.	0.	11.
Capricor.	0.	0.	2.	1.	1.	6.	3 Neb.	13.
Aquarius.	0.	0.	3.	4.	6.	3.	0.	16.
Pisces.	0.	0.	0.	3.	16.	11.	0.	30.
Summa.	2.	8.	20.	42.	76.	87.	6.	250
Stellæ Asterismi &c.	4.	3.	26.	42.	64.	58.	3.	200
Stellæ Dodecatemoria &c.	6.	11.	46.	84.	140.	145.	11.	442

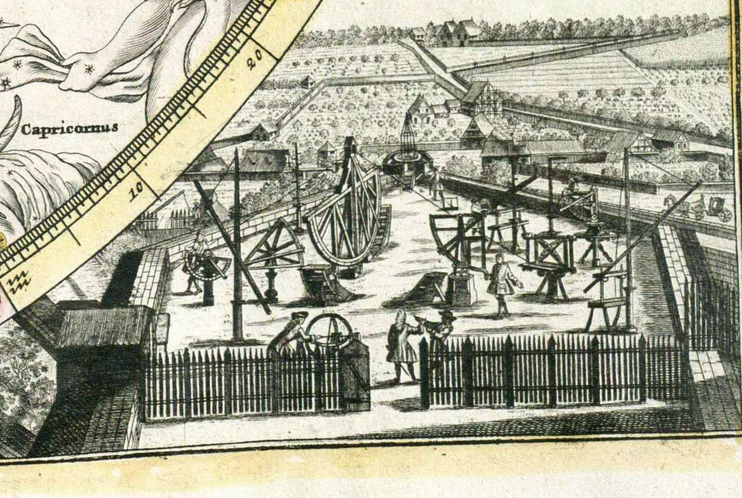
Stellæ boreales	4.	23.	64.	146.	184.	196.	10.	634.
Stellæ australes	2.	8.	20.	42.	76.	87.	6.	250
Stellæ Zodiaci	6.	33.	104.	258.	334.	367.	28.	1130
Stellæ Signorum Austr.	28.	34.	105.	218.	280.	140.	6.	771.
Stellæ Sig. Bor.	28.	68.	200.	476.	618.	614.	34.	1878

Dodecatemoria dimidia versus Boream.

Magnitud.	primæ	secundæ	tertiæ	quartæ	quintæ	sextæ	nebulosæ	Summa
Aries.	0.	3.	6.	22.	22.	26	1 Neb.	99
Taurus.	0.	4.	11.	27.	35.	32.	1 Neb.	110.
Gemini.	1.	3.	4.	25.	28.	40.	1 Sq.	107.
Cancer.	0.	2.	3.	18.	32.	22.	1 Sq.	78.
Leo.	1.	5.	18.	26.	11.	33.	1 Sq. 1 Neb.	80.
Virgo.	1.	6.	5.	25.	30.	31.	1 Sq.	98.
Libra.	1.	0.	15.	22.	22.	23.	0.	71.
Scorpius.	0.	5.	8.	30.	30.	25.	1 Sq. 1 Neb.	98.
Sagittarius.	0.	1.	12.	24.	19.	23.	1 Sq. 1 Neb.	76.
Capricornus.	2.	0.	10.	22.	25.	27.	1 Sq.	109.
Aquarius.	0.	1.	14.	22.	29.	31.	1 Sq.	99.
Pisces.	0.	3.	4.	18.	32.	23.	0.	73.
Summa.	6.	33.	104.	256.	334.	367.	28.	1130

Dodecatemoria	♈	♉	♊	♋	♌	♍
Stell. bor.	99.	130.	107.	70.	80.	90.
Stell. austr.	38.	62.	116.	81.	66.	46.
Summa.	137.	192.	223.	151.	146.	144.
Dodecatemoria	♎	♐	♑	♒	♓	
Stell. bor.	72.	92.	76.	89.	99.	77.
Stell. austr.	50.	79.	62.	52.	68.	54.
Summa.	122.	170.	137.	141.	167.	131.

OBSERVATORIUM NORIBERGENSE.
Prima hujus jecit fundamenta Georgius Christophorus Eimmartius ad annum 1678.

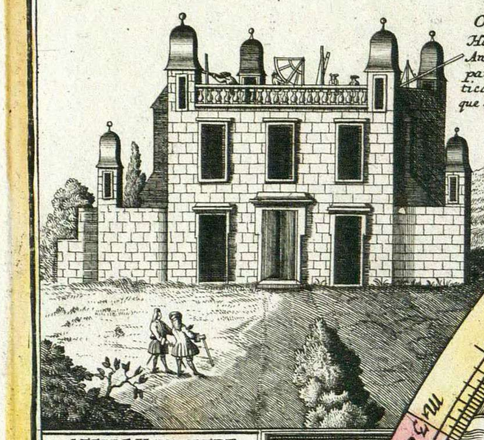


Aries. Taurus. Gemini. Cancer. Leo. Virgo. Libra. Scorpius. Sagittarius. Capricornus. Aquarius. Pisces.
Auriga. Perseus. Camelopardalus. Cassiopeia. Cepheus. Andromeda. Triangulum Majus. Triang. Minus. Musca. Piscis Borealis. Limm. Bor. Limm. Austr. Lacerta. Stellio. Cygnus. Lyra. Vulpecula. Pegasus. Delphinus. Equuleus. Aquila. Antinous. Sagitta. Cerberus. Scutum Sobiesci. Fisces Austr. Aquarius. Capricornus.
Leo. Leo Minor. Ursa Major. Lynx. Gemini. Pollux. Castor. Cancer. Coma Berenices. Chara. Asterion. Ursa minor. Virgo. Bootes. Tropicus Cancri. Corona Borealis. Serpens. M. Mænalus. Hercules. Libra. Scorpius. Magnitudines Stellarum.
Æquator.
Cancri.
Capricorni.
Pisces.
Aries.
Taurus.
Gemini.
Cancer.
Leo.
Virgo.
Libra.
Scorpius.
Sagittarius.
Capricornus.
Aquarius.
Pisces.

HEMISPHÆRIUM

in quo Fixarum loca secundum Eclipticæ ductum ad annum 1730. completum exhibentur a

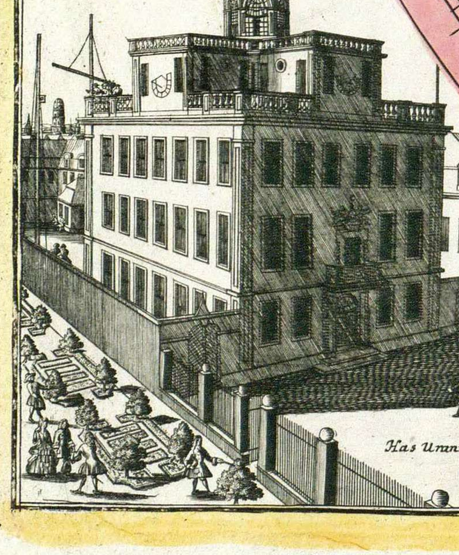
operâ IOH. BAPTISTÆ HOMANNI



OBSERVATORIUM ANGLICANUM.
Hoc Grenovici prope Londinum Carolus II, Angliæ Rex (prout ex ejus Inscriptione patet) Astronomicæ et Artis Nauticæ Patronus maximus in utrius que comodum ano 1666. extrui curavit.

STELLÆ HEMISPHÆRII AUSTRALIS Asterismi australes.

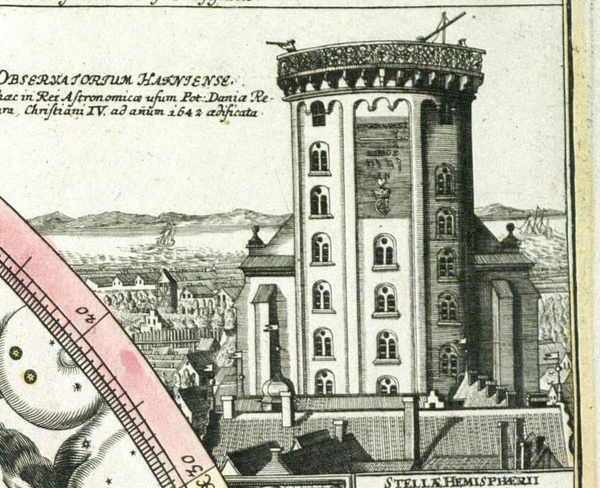
Magnitud.	primæ	secundæ	tertiæ	quartæ	quintæ	sextæ	varmag.	Summa.
Cetus	0	3	9	10	12	11	0	45
Orion.	2	4	4	9	24	28	1	Sig 62
Eridanus	1	0	8	29	8	2	0	48
Lepus	0	0	2	9	4	1	0	16
Canis maj.	1	5	1	5	10	0	0	22
Monoceros	0	0	0	10	7	2	0	19
Canis min.	1	0	1	0	4	7	0	13
Columba	0	2	0	1	6	1	0	13
Argonavis	1	6	12	13	13	1	0	48
Robur Caroli	0	1	2	7	2	0	0	12
Hydra	1	0	2	15	9	8	0	35
Crater	0	0	0	7	1	2	0	10
Corvus	0	0	3	2	2	1	0	8
Centaurus	1	6	7	10	9	1	1 N	35
Sextans Uraniæ	0	0	0	1	5	5	1 Sig	12
Lupus	0	0	2	3	14	4	0	23
Ara	0	0	1	6	1	1	0	9
Corona Austr.	0	0	0	1	3	8	0	12
Piscis notius	0	0	4	10	3	0	0	17
Grus	0	2	1	2	8	0	0	13
Phœnix	0	1	5	5	2	0	0	13
Indus	0	0	1	1	2	8	0	12
Pavo	0	1	3	5	4	1	0	14
Apus Avis Indica	0	0	0	4	3	4	0	11
Musca	0	0	0	2	2	0	0	4
Chamæleon	0	0	0	0	9	1	0	10
Triang. Austr.	0	1	2	0	2	0	0	5
Piscis volans	0	0	0	0	7	1	0	8
Dorado / Xiphias	0	0	1	2	1	2	0	6
Toucan	0	0	4	2	3	0	0	9
Hydrus	0	0	4	2	6	1	0	13
Summa	8	32	79	173	188	91	3	574



OBSERVATORIUM CASSELLANUM.
Has Uraniæ, gloriæ Dei nunciæ sacras extruxit ædes (ut Inscriptio edocet) Ser. Princeps Carolus I. Hassiæ Landgravius ano 1714.

COELI AUSTRALE

IOH. GABRIELE DOPPELMAIERO Math. PP. Acad. Imp. Leop. Carolinæ Naturæ Curios. nec non Reg. Scient. Acad. Borus. Socio Sac. Cæs. Maj. Geograp. Norimbergæ. Cum Privilegio Sac. Cæs. Majestatis.



OBSERVATORIUM HAFNIENSE.
Turris hæc in Rei Astronomicæ usum Pot. Daniæ Regis cura Christiani IV. ad annum 1642 ædificata.

STELLÆ HEMISPHÆRII AUSTRALIS Asterismi Zodiaci domicilia versus Austrum.

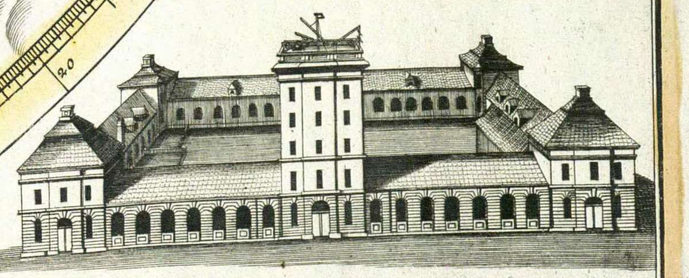
Magnitud.	primæ	secundæ	tertiæ	quartæ	quintæ	sextæ	varmag.	Summa.
Aries	0	0	0	0	3	0	3	
Taurus	1	0	5	6	9	13	0	34
Gemini	0	1	2	6	1	6	0	16
Cancer	0	0	2	2	4	8	0	16
Leo	0	0	0	8	5	4	0	17
Virgo	1	0	0	0	6	3	0	10
Libra	0	0	1	0	0	1	0	2
Scorpius	1	2	7	9	4	3	1 Sig	28
Sagittarius	0	0	5	6	7	2	0	20
Capricornus	0	0	2	1	7	6	0	16
Aquarius	1	0	1	3	17	8	1 Sig	32
Pisces	0	0	1	1	4	1	0	7
Summa	4	3	26	42	66	58	3	200
Stell. bor. in Zodiaco	2	8	20	42	75	87	8	242
Stellæ per Zod.	6	11	46	84	139	145	11	442

Stellæ austr.	8	32	79	173	188	91	3	574
Stell. austr. in Zod.	4	3	26	42	66	58	3	200
Stell. Nemsp. Australes	12	35	105	215	254	149	6	774
Stellæ Hemisp. bor.	6	33	104	230	234	163	18	996
Pro totius Cpli. Stellis	18	68	209	453	580	312	24	1870

Dodecatemoria bimidia versus Austrum

Magnitud.	primæ	secundæ	tertiæ	quartæ	quintæ	sextæ	varmag.	Summa.
Aries	0	1	9	10	11	7	0	38
Taurus	0	1	9	31	8	13	0	62
Gemini	3	6	12	26	42	28	1 Sig	118
Cancer	3	6	8	18	26	20	0	82
Leo	1	2	9	28	29	13	0	66
Virgo	0	3	1	18	14	9	1 Sig	46
Libra	1	3	9	13	18	6	0	50
Scorpius	0	5	11	20	29	13	1 Nig	79
Sagittarius	1	3	9	18	18	10	1 Nig	60
Capricornus	1	1	10	11	18	10	0	54
Aquarius	1	2	10	20	23	11	1 Sig	68
Pisces	1	2	8	8	26	9	0	54
Summa	12	35	105	215	278	149	6	774

Dodecatem.	♈	♉	♊	♋	♌	♍
Stell. auster	38	62	118	81	66	46
Stell. bor.	99	130	107	78	80	98
Summa	137	192	225	159	146	144
Dodecatem.	♎	♏	♐	♑	♒	♓
Stell. auster	50	79	61	51	68	54
Stell. bor.	71	91	76	89	99	77
Summa	121	170	137	140	167	131



OBSERVATORIUM BEROLINENSE.
Hoc ad præsentis seculi initium sub Auspicio Pot. Borussiæ Regis Friderici erectum.

GLOBI COELESTIS IN TAB… PLANAS REDACTI PARS I.

in qua Longitudines Stellarum fixarum ad annum Christi 1730 tam Arithmeticè quam Geometrice exhibentur

à IOH: GABR: DOPPELMAYR MATH: PP. Academ: Caes: Nat: Curiosorum, nec non Societatis Regiæ Borussicæ Socio

Operâ IOH: BAPT: HOM… Cum P… Cæs. Majestatis.

	URSA MINOR.	Mag.	Longit.	Latit:
A	Polaris	2	29.50.53	68.3.0. B
B	Humerus	2	9.20.25	74.56.43 B
C	In pectore	3	17.35.54	76.19.36 B
D	In dorso	4	23.31.44	69.5.4.30 B
E	In latere s. ventre	5	26.51.57	69.11.57.43 B
F	Prima caudæ	4	5.21.11	69.13.51.8 B
G	Media caudæ	4	27.49.3	73.49.54.0 B
H	Ad humerum proxima	4	6.8.24	70.11.23.24 B
I	altera	6	29.5.24	69.20.39. 0 B
K	In capite	5	22.27.50	69.31.5. B
L	Sub capite sequens australis	5	7.18.43	70.14.3.38 B
M	Sub capite præcedens borealis	6	9.36.10	70.16.5.42 B
	DRACO.			
A	Ad rostrum	3	8.7. 3.	75.20.35 B
B	In vertice	3	24.8.31.	74.5.9.37 B
C	Ante flexu: II. lucida borealis	3	14.24.38	61.48.39 B
D	Post flexum III. secunda	3	28.47.41	59.8.50. 0 B
E	Ante flexum IV. prior	3	30.15. 2	78.29. 0 B
F	Ante flexum IV. proxima	3	12.46.41	74.29.15 B
G	In flexura IV.	3	0.38.36	77.7.24 B
H	Prima caudæ	3	13.31.57	79.56.42.20 B
I	Penultima caudæ	3	12.22.35	82.45.5 0 B
K	Ultima caudæ	3	6.29.20	85.30.47 B
L	In lingua	4	20.45.26	76.31.17. B
M	In ore	4	6.31.53	78.38.10 B
N	Ad genam	4	12.41. 1	80.21.36 B
O	In flexura I. borealis	5	28.47. 8	81.53.45 B
P	In flexura I. australis	5	26.23.37	77.58.0 B
Q	In flexura I. media	5	22.43.56	77.33.28 B
R	Post flexuram I.	4	11.17.23	82.8.23. 0 B
S	Ante flexura II. austr: parvula	5	2.43.24	77.30.36 B
T	In flexura II. præcedens austr.	5	0.37.43	77.30.36 B
V	In flexura II. media austr. vel seq. bor.	4	16.57.47	78. 9. 0. B
W	In flexura II. bor. præced parvula	4	28.9.54	80.57.12 B
X	In flexura II. duarum australi	3	29.17.4	79.47.50 B
Y	Post flexum II. præced. bor. propc.	4	17.11.45	83.11.20 B
Z	Post flexum II. duaru: præced. austr. sequens	4	19.22.7	81.2.0. B
a	Post flexu: II. tertium præced.	5	7.59.34	82.44.48.0 B
b	Post flexu: II. 4tum præced.	4	0.0.51.	84.8.0. B
c	Post flexu: II. seqq. tria: ult. austr.	4	24.44.41	83.49.30 B
d	Post flexu: III. Polo proxima s. prima	4	11.21.29	86.26.30 B
e	In flexura III. præcedens	3	0.59.43	79.53.36 B
f	Post flexum III. tertia	5	0.27.48	83.39.38 B
g	Post flexu: III. quarta parvula	5	0.21.58	85.38.35 B
h	Prope primam caudæ parva	5	3.4.21	79.49.31. 5. B
i	In extremitate caudæ	5	10.51.24	69.60.38.49 B
k	Caput præcedens borealis	5	8.44.44	71.46. 0 B
l	Sequens ult: inter caudæ et ursinam	6	18.41.30	79.23.23 B
m	Supra caudæ præc: inter ult: duas	5	22.22.33	68.34.33 B
n	Supra caudæ sequens boreal. caud.	5	25.54.31	69.24.8. B
o	Supra penult. caudæ seq. austr.	6	1.5.19.	76.33.32 B
p	In tertia flexura sequens	6	29.53.38	70.29.54 B
q	Caput præcedens australis	6	26.28.58	71. 7.30 B
	CEPHEUS.			
A	Humerus sinister	3	9. 9.51	68.55.1 B
B	Cingulum	3	11.49.51	67.17.12 B
C	In dextro crure	3	26.24.30	64.36.28 B
D	In tiara prima	4	9.25.52	74.57.33 B
E	In tiara secunda	4	10.20. 6	61.30. 0 B
F	In Facie	4	14. 1.21	69.32.25 B
G	In sinistro cubito	4	1.30.38	73.57.32 B
H	In sinistro lacerto	4	0. 1.45	77.44.48 B
I	In dextro humero	4	29.38.58	62.34.30 B
K	Inter Scapulas	5	20.38.45	69.43. 30 B
L	In sinistro crure	4	29.24.26	73.26.53 B
M	In tiara duar. supr. præced.	5	6.21.41	79.38.0 B
N	In tiara trium media	5	4.31.31	71.35.56 B
O	In tiara duar. supre? sequens	5	7.7.21.	73.34.35 B
P	Cingul. secunda	6	4.47.10	70.34.38 B
Q	Cingul. tertia	6	7.19.48	70.17.59 B
R	Cingul. quinta	6	9.32.44	68.58.35 B
S	Cingul. quarta	6	11. 5. 9	69.21.0 B
T	Inter pol. dext: es Isabellu: Cassiopeæ	6	25.49.43	59.45.47 B
V	In corona	6	3.57.21	61.34. 0 B
W	Supra coronam	6	3. 9.38	62.49.0 B
X	Parva ad Boreal: in tiara tertia	6	10.30.43	67.38.30 B
Y	In Sceptro	6	21.54.30	66.43.43 B
Z	In pallio austr: ad sinistr: brach.	6	6.22. 0	76.18. 0 B
a	In pallio borealis	6	9.28. 7.	78.46.38 B
b	Sub pede dextro in fasc: sequens	6	12.17.21	67.51.50 B
c	Ad Stellæ pol: inter ped. austr.	6	28.53. 3.	67.13.48. 0
d	Sub fascia præcedens	6	5.39.39.	75.58.6.0 B
e	In tibia dextra superior	6	5.11.38.	67.38.30 B
f	In tibia dextra inferior	6	28.32.36	66.28.43 B
g	In fimbria pall. ad sinistr. brachi	6	9.57.12.	77.37.48 B
h	Manus sinistra	5	21.11.30	69.32. 0 B
i	In sinistro latere	6	21.26.39	60.57.20 B
k	Sub sinistro humero in axilla	6	16.38. 2.	69.55.34 B
l	Supra sinistr. humerum propior	6	10.57.47	66.40.35 B
m	Supra sinistr. humerū remotior	6	10.52.38	65.29.15 B
n	In collo	6	16.36.43	69.36.30 B
o	Supra dextrum humerum	5	23.40.33	67.2.0 57 B
p	In dextro cubito	5	24.28.33	67.39.33 B
q	In dextro brachio ad sceptrum	6	9.8.56.	69.0.0.33 B
r	In fimbr tunicæ trium seqq sup:	6	16.58.41	68.1.40 B
s	In fimbr. tunicæ trium seqq media	6	19.33.31	68.47.55 B
t	In fimbr. tunicæ trium seqq inferior	6	17.36.12	67.30.10 B
u	In fimbr. tun: præcedentur seq.	6	12.2.11.	67.30.40 B
w	In fimb. tun. præcedent: præcedes	6	8.56.56	67.48.0 B
x	Sub pede dextro in fascia præcedens	7	11.12.58	67.47.27 B
y	Sub fascia sequens	6	11.38. 0.	1.46.3.33 B
z	Sub pede dextro in fascia media	6	18.6.26	67.57.54.25
a	Ad Stellam polarem inter pedes borealis	5	23.59.53	67.28.35 B
b	Sub cingulo australis	6	13.52. 0	68.33.35. B
c	Sub cingulo borealis	6	14.7.32.	66.36.0 B
	URSA MAJOR.			
A	In latere	2	11.43.39	49.40.43 B
B	In ventre	2	18.36.50	59.7.19 B
C	In dorso	3	27.10.45	58.38.38 B
D	In taxa	2	26.37.52	47.8.0. B
E	Prima caudæ	2	5.5.1.	48.59.0 B
F	Media caudæ	2	11.48.24	46.43.7 B
G	Ultima caudæ	2	23.4.50	44.42.5 B
I	In drace sinist: præcedens borea	3	20.1.58	60.30.38 B
K	In drace sinis sequens et austr.	3	0. 9. 2.	58.59. 7. B
L	In armo dextro australis	3	3.33.43.	53.54.43 B
M	In drace dextra	4	1.30.39.	43.43.44 B
N	In drace dextra	4	3.48.42.	40.20.40 B
O	In retro sequens	4	28.38.35	49.40.24.7 B
P	In maxilla præcedens australis	5	22.5.25	49.52.17.40 B
Q	In maxilla sequens et borealis	4	23.47.16	49.44.29.56 B
R	Ad oculum præcedens	5	18.8.33.	49.44.30.6 B
S	Ad oculum sequens austr.	4	19.0.33.	49.51.47.40 B
T	Ad aurem præcedens	4	20.23.30	49.57.30. 0 B
V	Ad aurem sequens	5	21.32.48	49.47.47.7 B
W	In collo australis	5	25.28.57	49.40.47.32 B
X	In collo borealis	4	27.1.7.	49.44. 5. 0. B
Y	In cervice	4	28.34.56	51.33.12 B
Z	In humero dextro borealis	4	4.33.30	42.36.36 B
a	In humero dextro australis	5	3.31.36.	38.13.47 B
b	Parvula juxta armum dext. borealis	6	1.43.36.	38.35.30 B
c	In armo sinistro borealis	5	29.29.58	46.3.44 B
d	In armo sinistro australis	5	28.28.38	44.54.5 B
e	In ungula post: dext: borealis	4	13.44.15.	47.30.26 B
f	In ungula post: dext. australis	5	17.15.29	43.28.55.7 B
g	In genu dextro australis	5	22.43.36	33. 2.37 B
h	In genu dext. bor. / sub dextrem. prog.	4	24.48.36	37.28.56 B
i	In femore dextro	4	24.3. 4.	34.36.56
k	In triang. supr. caud. præced. bor.	6	19.26.33	39.57.44.33 B
l	In triang. supr. caud. præced. austr.	6	17.38.41	40.26.30 B
m	In triang. supra caud. sequens	6	19.37.23	38.48.17.33 B
n	Superior lumbi	4	8.22. 0	44.48.20 B
o	Inferior lumbi	5	8.28.44.	44.53.34.58 B
p	Supra primam caudæ	5	5.47.31.	40.55.14. 0 B
q	Supra medium caudæ et inter. prim. caudæ draconis	4	4.53.31.	40.20.31.20 B
r	Supra tergum nebulosa	6	28.30.7.	34.0.0.33 B
s	Præcedens caput	6	8.3.39.	64.45.55.36 B
t	In fronte superior inter aures	6	13.37.28	64.46.54.32 B
u	In fronte inferior inter oculos	5	14.33.7.	64.43.22.36 B
w	In rostro præcedens	6	18.34.27	62.34.28.18 B
x	In poplite ped. anter. dext. præced sequens	6	5.22.38	31.9.0.43 B
y	In imo ventre	6	8.54.0.	30.39.38 B
z	Sub dextro femore sequens	6	28.0.19	33.36.34 B
a	In genu dextro ped. post: bor.	6	14.8.39	33.38.40 B
b	In medio ventris med: seq.	6	15.22.31	34.30.34 B
c	In medio ventris duar. prac. bor.	6	30.31.43	34.54.50 B
d	In medio ventris duar. prac. austr.	6	30.46.6.	34.26.56 B
e	Supra cervicem	6	21.36.30	29.53.38 B
f	Ad ter. supra medium caudæ	6	22.1.10	29.10.20 B
g	Ante latus	6	28.36.43	30.9.30 B
h	Supra collum	5	1.21.33	25.39.30 B
i	Latus sequens	6	18.51.21	23.34.0 B
k	In rostro media	6	17.33.33	26.38.37.55 B
	CAMELOPARDALUS.			
A	In cervice s. sinistra aure	5	30.58.51	49.57. 0.33 B
B	Ad genam	6	11.46.21	49.51.19 B
C	In collo prima	6	7.50.31	49.3.30.45 B
D	In collo tertia australis	6	5.24.51	48.57.13. B
E	In collo secunda borealis	6	1.50.31	49.39.43. 7. B
F	Ad caput vel supra med. caud. Drac.	5	25.44.31	49.46.32.53 B
G	In collo quarta	6	29.46. 6	49.16.38. 3. B
H	In collo quinta s. meduct. colli	5	1.33.31.	49.33.40.30 B
I	Supra tergum	5	23. 6. 6	49.59.50.40 B
K	In tergo	6	20.59.23	50.34.38 B
L	Ungula dextri pedis poster	4	13.31.33	30.30.58 B
M	Infra genu dext. ped. poster	5	29.46.23	31.43.34. B
N	Inter pedes posteriores	5	28.48. 0	30.36.36 B
O	In pede sinistro posteriori	6	8.48.12	30.26. 0 B
P	Ultima caudæ	5	1.37. 2	30.30.57 B
Q	Mediarum in cauda inferior	5	4.31.24	28.26.53 B
R	Mediaru: in cauda superior	5	2. 2.21.	29.33.23 B
S	In eductione caudæ s. prima	5	6.6.40	28.43.36 B
T	In coxa præcedens	5	8.8.30	24.14.58 B
V	In coxa sequens	6	12.32.7	24.24.28 B
W	In femore sin. super. s. prima	5	6.42.26	25.44.4. B

		M	Longit	Latit	20
X	In femore sinistro secunda	5	8.17.50	25.17.30 B	
Y	In femore sinistro tertia præced	6	9.29.50	24.28.38 B	
Z	In femore sinistro quarta	6	8.17.58	27.18.30 B	
a	Supra genu post. dext	6	11.19.09	27.36.29 B	
b	In femore sin. quinta seq. omn.	6	10.47.34	29.34. 2. B	
c	In ventre	6	4.37.9.	31.20.30 B	
d	Inter tergum et prim. caudæ	6	10.31.22	29.31.30 B	
e	Inter pedes anteriores	6	28.38.37	31.46.42 B	
f	In pede dextro præcedens	5	28.44.37	31.48.40 B	
g	In pede dextro media	5	3.43.56	29.55.36 B	
h	In pede dextro inferior	5	3.7.53	29.22.38 B	
	CASSIOPEA.				
A	Lucida Cathedræ	3	0.22.58	57.33.38 B	
B	Schedir in pectore	3	4. 2.54	56.57.26 B	
C	In flexura ad coxas	3	10.28.21	56.48.40 B	
D	Dextrum genu	3	18.20.47	56.30.50 B	
E	Sinistrum genu	3	20.58.38	59.30.50 B	
F	Caput	4	3.43.54	59.44.50 B	
G	Cingulum	4	6.29.21	60. 3.49 B	
H	Extrema pedis	4	28.22.0	58.38.30 B	
I	In sinistione sedis	6	8.55.26	64.23.35 B	
K	Nova in Cassiopea 1572	6	9. 8. 9	63.36.0 B	
L	Extrema virgæ	6	2.37.36	62.30.2 B	
M	Penultima Virgæ	6	28.45.58	62.37.17 B	
N	Secunda Virgæ	6	1.20. 6.	64.58.33 B	
O	Prima Virgæ	6	29.47.26	64.42.30 B	
P	Parvula ad crines	6	1.43.44	65.49.0 B	
Q	In dextra cubito	6	28.46.56	59.49.0 B	
R	In sinistrate sedis borealis	6	27.23.55	64.39.44.0	
S	In sinistate sedis australis	6	27.24.1.	63.38.0	
T	In sinistro brachio	4	7.28.58	63.36.33 B	
V	In sinistro cubito	6	8.5.56	63.6.28 B	
W	In gyro umbilici	6	8.59. 6.	63.33.35 B	
X	Ad genu dextrum præced	6	11.44.2	63.6.34.0 B	
Y	Ad genu dextrum sequens	6	14.43.2	63.18.0.58 B	
Z	In scabello sequentium duarum boreal	6	20.23.49	54.40.22 B	
a	In scabello seqq duarum austr.	6	20.2.35	53.58.43 B	
b	Præcedentiu: duarum australis	6	18.54.36	53.54.43 B	
c	Præcedentium duarum borealis	6	17.54.51	54.38.7. B	
d	Sub scabello præcedens	6	3.47.41	53.53.30 B	
e	Sub scabello sequens	6	6.37.24	53.30.28 B	
f	In summitate sedis suprema omnium	6	9.27.50	56.3.17. B	
g	In summitate sedis suprema omnium	6	8.30.26	51.20.58 B	
h	Infra erectionem sedis	6	11.21. 6	53. 7.11 B	
i	Supra erectionem sedis	6	10.17.36	52.42.22 B	
k	In dextro femore	6	10.2. 55	52.27.33 B	
l	Parvula ad coxas	5	20.8.45	52.51.7 B	
m	In limbra tunicæ præcedens prima	5	22.31.32	52.46.20 B	
n	In limbra tunicæ secunda	5	22.24.12	52.32.30 B	
o	In limbra tunicæ tertia	5	22.23.36	52.19.31 B	
	In limbra tunicæ quarta et infima	5	23.23.36	52.19.31 B	
	CYGNUS.				
D	Cauda	2	3.42.11	59.57.43 B	
E	In ancone alæ boreæ	3	31.22.57	62.47. 0 B	
K	Extrema et suprema alæ boreæ	3	31.34.20	58.50. 0 B	
L	Alæ boreæ penultimæ s. mediæ	4	28.35.38	58.27.46.5 B	
M	Alæ boreæ antepenultimæ vel infimæ	4	24.46.37	60.56.35. B	
N	In boreo pede præcedens	5	29.28.34	60.51.45 B	
O	In boreo pede sequens borealis	5	26.53.31	61.24.10. B	
P	In australi pede præcedens	5	2.29.38	63.54.30 B	
Q	In australi pede seq. vel in austr. pede seq	5	2.7.26	63.58. 0	
R	In vola alæ australis borealis	5	6.31.7	63.34.50 B	
S	In vola alæ australis media	5	8.58.27	63.33.32 B	
T	Inter pectus et pedem	5	4.39.58	61.51.30 B	
d	Nebulosa supra caudam præc. in pede bor. ult.	6	2.29.42	64.7.30 B	
e	Nebulosa supra caud. seq. inferm	6	28.36.9	63.36.40 B	
f	Infima ventris caudæ sequens	5	4.57.33	59.59.20 B	
g	In fup. parte vent. a seq. inter caudam et pedem austr.	5	4.36.6	58.56.57 B	
h	In superiori parte ventris duarū prac	5	3.44.27	58.36.57 B	
i	In ductione caudæ præcedens	6	0.31.6.	60.7.53 B	
k	In ductione caudæ sequens	6	31.30.33	60.33.7 B	
l	Infra caudā et ped. austr. præced	6	30.30.51	59.54.0 B	
m	Infra caudā inferm. sequens	6	29.38.6	58.58.50 B	
n	In extremitate caudæ borealis	5	29.38.1	56.57.50 B	
	In extremitate caudæ austr	5	29.38.1	56.57.50 B	
	LYRA.				
R	Ad collum Vulturis superior	6	26.20.54	61.32.22 B	
	HERCULES.				
K	In dextra sura	3	26.3.33.	60.42.5. B	
W	In sinistro femore boreali	3	19.22.49	63.30.40 B	
X	In sinist: femore præced. austr	3	17.39.53	60.43.17 B	
Y	In sinistro poplite vel sura	3	14.54.36	60.56.38 B	
Z	In sinistra sura vel tibia præc	4	13.40.38	60.43.17 B	
a	In sinistra tibia sequens	4	11.47.58	60.43.49. B	
b	Ad sinistrum calcaneum	4	8.22.48	60.57.20 B	
c	Ad sinistram sura infima	6	7.38.36	61.16.7 B	
d	In talo dextri pedis	6	5.38.0.	57.33.30 B	
e	Ad calcaneum dextrum	6	6.36.42	57.33.33 B	
f	Nebul in extrem. dextri pedis	6	4.26.51	56.23.44 B	
g	Inter ped. dextr. præc. in Exur Leon.	6	23.43.20	56.56.28. B	
h	Inter ped. infer. præc. in Exur Leonis	6	23.43.20	56.56.28. B	
o	In ped. dextro media	6	5.34.45.	56.27.24. B	
	BOOTES.				
D	Caput	3	20.27.32	52.31.37 B	
H	Dextræ manus præcedens	4	26. 3. 7.	50.48.52 B	
K	Dextræ manus infima	4	27.24.51	47.48.40 B	
L	Dextræ manus ultima	4	28.31.21	46.8.20 B	
Y	In dextro lacerto	3	1. 7.21.	49.44.41 B	
e	In extremitate clavæ præced.	3	29.21.36	47.43.27 B	
h	In dextro cubito	3	3.20.38	47.24.0. B	
i	Sub capite australis minor	6	20.40.44	47.48.20 B	
	Ad genam	6	19.43.38	46.29.0. B	
	CANES VENATICI ASTERION ET CHARA.				
T	In Tergo Asterionis præcedens	6	29.58.34	39.47.30 B	
V	In fronte Asterionis	4	26.26.32	39.31.27. 0. B	
W	Ad aurem Asterionis	4	20.30.31	39.54.45.35 B	
	LYNX s. TIGRIS.				
A	Gena sinistra ad oculum	6	27.35.25	38.35.0 B	
B	Ad menu: sive in naribus præc	6	29.42. 6	38.37.47 B	
C	Ad menu: sive in naribus seq.	6	28.56. 6	38.56.30 B	
D	In colla superior s. ad collum	6	8.33.31	39.33.33 B	
E	In collo inferior	6	6.27.31	39.34.34 B	
G	In humeri dextram	6	8.33. 6	39.17.37 B	
H	Supra cervicem	6	14.38. 3.	39.36.17. B	
I	In eductione colli	6	16.7.39.	38.38.40 B	
K	In tergo	6	18.46.58	40.30.30 .16 B	
L	In tergore sequens	6	11.50.25.	40.26.34.38 B	
M	In latere præcedens	6	10.28.54	40.47.1.50 B	
N	Ad armum dextrum	6	7.30.10.	40.22.40.50 B	
O	In imo pectore	6	23.47.46	40.53.4.47 B	
P	Ad eductionem caudæ præced.	6	26.46.30	40.26.40.30 B	
Q	Ad eductionē caudæ sequens	6	29.37.39	40.17.6. 3. B	
R	In cauda superior. ad ped. ursæ maj	6	1.30.46	41.34.49 B	
S	In cauda media	6	6.47.39.	40.05.42 B	
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H	Suprema capitis	6	25.29.43	17.22.32 B	
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k	Supra sinistram humeru: pars	5	26.39.43	17.28.33.36 B	
d	In sinistro humero	5	27.17.32	17.47.12. B	
n	Caput capellæ	5	17.44.44	17.31.51.7 B	
o	In inferiori plumula	6	20.37.42	17.34.39.54 B	
p	Inter uramque plumulam	6	20.37.42	17.34.39.54 B	
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B	Humerus sinister	2	26.35.35	34.28.43 B	
C	Flexura lateris	3	1. 2.28.	17.11.9.20 B	
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F	Caput Medusæ Algol	2	22.26.21	22.23.17 B	
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L	In sinistro humeru: Persei	6	24.59.30	17.26.50.0	
M	In sinistro brachio	4	23.21.22	14.39.36 B	
N	In cervice	4	20.59.34	13.36.25 B	
O	In dextro humero	4	25.23.58	10.37.39 B	
P	In dorso	4	24.56.31	10.48.21.0 B	
Q	In dextro cubito superior	5	28.53.22	7.27.49.7 B	
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T	In sinistro femore præcedens	6	1.6.0.31.	12.26.39.38 B	
V	In sinistro femore sequens	5	8.6.3.	12.28.21.2 B	
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X	In sinistro poplite præcedens	6	7.3.1.	12.26.39.12 B	
Y	In sinistro poplite sequens	6	7.17.33.	12.48.32.46 B	
Z	In sinistra sura	6	9.6.56	12.26.6.18 B	
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c	In vertice s. in crista inferior	6	17.19.35	30.22.22.5 B	
g	Oculus vel duarum sibi adhær.	6	17.48.57	13.40.30 B	
h	In medio ensis	6	11.36.42	13.36.37 B	
i	In cuspide ensis	6	13.30.30	13.56.37 B	
k	In medio ensis	6	15.30.28	13.52.21.35 B	
l	In sinistro cubito inferior	6	17. 7.42	13.31.33 B	
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Y	In catena finist: man: præc: secund.	6	10.58.28	39.34.45 B	
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n	Inter pedes trui: in pallio infer	5	5.2.19.	35.39.37 B	
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E	In sinistro pede anteriori	5	28.34.21	43.21.2. B	
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C	In hasta	6	6.40.2.	42.20.40 B	

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in qua Longitudines Stellarum fixarum ad annum Christi
à Ioh. Gabr. Doppelmayr Math. P.P. Academ. Cæs.
Operâ Ioh. Bapt. Hom

S PLANAS REDACTI PARS II.
m 1730 tam Arithmeticè quam Geometricè exhibentur
ar: Nat: Curiosorum nec non Societatis Regiæ Borussicæ Socio
. Cæs. Maj. Geogr. Norimbergæ.

		Mag.	Long.	Latit.
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S	In pectore sequens	4	20.40.57	♑ 28.25.25 B
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V	Inter Os et pedem sequens	4	1.19.8	♑ 28.6.38 B
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Z	In ventre borealis præcedens	6	1.33.21	♒ 28.40.45 B
a	In ventre borealis sequens	6	1.49.21	♒ 28.53.50 B
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c	Ad pedem dextrum	6	7.31.51	♒ 36.30.3 B
d	In Ancone alæ præcedens	6	22.34.51	♓ 0.0.46 B
e	In ancone alæ sequens	5	24.21.1	♓ 4.27.56 B
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D	Caudæ sequens	3	19.59.29	♒ 27.10.4 A
P	In dorso sequens	5	13.56.11	♒ 24.51.1 A
S	In latere	6	11.50.28	♒ 21.36.6 A
T	In ventre australis	5	13.10.39	♒ 16.53.13 A
V	In ventre coniqua borealis	6	13.15.21	♒ 16.38.32 A
W	Ad Ilia præcedens	4	16.26.35	♒ 14.54.21 A
X	Ad Ilia sequens	5	17.51.3	♒ 14.43.47 A
Y	Extrema caudæ	6	21.51.51	♒ 17.51.5 B
Z	Penultima caudæ	5	21.39.36	♒ 21.1.41 B
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e	In cauda antepenultima	6	19.38.46	♒ 20.5.24 A
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B	Humerus dexter	3	19.39.59	♓ 24.50.2 B
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G	In capite superior	6	24.33.46	♓ 25.26.9 B
H	Sub sinistro humero	3	28.22.1	♒ 29.14.55 B
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K	In Pollice sinistræ manus	5	5.1.21	♓ 10.39.39 B
L	In carpo sinistræ manus	4	5.11.6	♓ 8.55.34 B
M	In vola sinistræ manus	4	6.41.31	♓ 8.34.44 B
N	In sinistro latere præcedens	4	29.30.51	♒ 27.47.13 B
O	In sinistro latere sequens	6	0.16.34	♓ 2.26.53 B
P	Supra podicem	4	24.59.9	♓ 3.59.9 A
Q	In sinistro femore	5	1.39.33	♓ 7.45.1 A
R	In dextro genu præcedens	5	28.48.38	♒ 20.47.13 A
S	In dextro genu sequens	6	1.55.38	♓ 0.0.0 A
T	In sinistro femore	5	4.51.10	♓ 3.34.19 A
V	In sinistro pophite Scheat	3	5.7.26	♓ 3.5.58 A
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c	Poste flexum I tertia	5	12.58.57	♓ 14.32.25 A
d	Poste flexum I quarta	5	13.5.57	♓ 14.44.37 A

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e	Ante flexum II borealis	5	18.57.34	♓ 0.57.51 A
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g	In II flexu borealis	5	19.25.49	♓ 4.43.3 A
h	In II flexu media inferior	6	19.59.29	♓ 3.50.51 A
i	In II flexu seq. australis	6	17.6.32	♓ 6.36.0 A
k	Poste flexum II borealis	5	20.19.59	♓ 4.54.31 A
l	Poste flexum II media	5	20.18.46	♓ 3.24.31 A
m	Poste flexum II infima	5	21.13.9	♓ 1.30.28 B
n	In ultimo flexu suprema	5	6.47.21	♓ 9.37.36 A
o	In ultimo flexu media	5	6.24.46	♓ 9.31.15 A
p	In ultimo flexu infima	5	5.7.1	♓ 6.42.43 A
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r	In capite pisc. majoris ult. ad hom	6	27.22.34	♓ 6.44.4 A
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w	In capite ad aure? inferior	6	24.24.14	♓ 14.38.8 B
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y	In clune sinistro	7	27.50.31	♓ 15.35.5 A
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B	In ore piscis australis	5	19.52.21	♑ 6.50.4 B
C	Australis in capite piscis australis	6	17.38.55	♑ 7.29.9 B
D	Borealis in capite piscis australis	6	19.35.51	♑ 8.56.12 B
E	Præcedens in tergo piscis australis	5	21.28.45	♑ 4.39.1 B
F	Sequens in tergo piscis australis	5	23.53.51	♑ 3.14.5 B
G	Præcedens in ventre piscis austr.	5	18.9.41	♑ 2.29.57 B
H	Sequens in ventre piscis australis	5	22.53.57	♑ 0.23.27 B
I	Australis in cauda piscis australis	5	28.49.31	♑ 4.43.5 B
K	Borealis in cauda piscis australis	5	0.35.41	♑ 8.56.58 B
L	In lino australis prima	6	4.34.41	♑ 9.56.58 B
	secunda	6	6.43.21	♑ 13.43.36 B
	tertia	4	10.25.6	♑ 12.30.56 B
	quarta	4	13.49.21	♑ 13.33.1 B
	quinta	4	16.8.36	♑ 10.27.1 A
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In ventre media		5	25.5.3	♑ 17.27.12 B
In ventre suprema sequens		6	26.3.36	♑ 18.42.28 B
In dorso media		5	29.43.35	♑ 21.51.58 B
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In dorso inferiorui sequens		5	20.50.55	♑ 28.47.39 B
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B	Secunda Arietis	3	0.23.48	♈ 8.28.46 B
C	Prima Arietis	5	29.46.48	♓ 30.0.2 B
D	In collo sub cornu	5	29.43.38	♓ 28.27.3 B
E	In capite borealis	5	3.48.38	♈ 9.34.47 B
F	In capite media	6	3.41.24	♈ 7.24.3 B
G	In capite australis	5	3.6.38	♈ 5.44.56 B
H	In dorso	6	0.28.38	♓ 26.7.20 B
I	In ventre	6	30.34.38	♓ 24.0.3 B
K	In femore præcedens	6	11.23.33	♈ 0.44.3 B
L	In femore sequens	6	13.8.28	♈ 3.32.6 B
M	In pede posteriori præcedens	6	9.40.56	♈ 0.34.57 B
N	In pede posteriori sequens	6	11.38.8	♈ 0.18.8 B
O	In eductione caudæ	6	14.44.23	♈ 4.30.0 B
P	Prima caudæ	6	17.4.39	♈ 3.48.45 B
Q	Media f. secunda caudæ	5	18.31.6	♈ 6.52.41 B
R	In musca prima	5	22.27.33	♈ 10.50.2 B
S	In musca secunda	4	23.11.26	♈ 11.37.56 B
T	In musca tertia	4	24.36.56	♈ 12.28.30 B
V	In musca lucida et quarta	3	24.27.41	♈ 10.45.45 B
W	Supra verticem inter cornua præced	6	1.56.24	♈ 10.50.3 B
X	Supra lucidam Arietis	6	5.38.28	♈ 9.26.3 B
Y	Ante collum superior	6	27.26.36	♓ 9.0.47 B
a	Ante collum inferior	6	27.26.36	♓ 8.47.3 B
b	In pede sinistro	6	8.57.33	♈ 2.23.55 A
	PISCIS AUSTRIN. S. NOTIUS.			
A	In ambitu capitis præced	4	23.40.0	♒ 20.35.0 A
B	Media	4	27.30.0	♒ 22.30.0 A
C	Sequens	4	28.20.0	♒ 22.0.0 A
D	Quæ ad branchiam	4	27.20.0	♒ 26.30.0 A
E	In fossa australi atque dorso	5	28.10.0	♒ 29.50.0 A
F	In alto duarum sequens	5	24.30.0	♒ 25.30.0 A
G	Antecedens	4	21.50.0	♒ 25.0.0 A
H	In fossa septentr. sequens trium	4	28.30.0	♒ 28.35.0 A
I	Media	4	24.50.0	♒ 26.55.0 A
K	Præcedens trium	4	28.0.0	♒ 28.45.0 A
L	In extrema cauda f. potius ad ea			
	put gruis referendum	5	13.30.0	♒ 22.30.0 A
	CETUS.			
A	Lucida mandibulæ	2	10.38.28	♈ 28.37.6 A
B	Media in ore	3	5.43.23	♈ 22.0.0 A
C	Ad genam	3	3.47.44	♈ 24.27.1 A
D	In dorso orientalis	3	12.22.23	♈ 25.44.55 A
E	In dorso occidentalis	3	7.50.36	♈ 26.6.39 A
F	Borealis caudæ	3	27.20.59	♑ 29.59.32 A
G	Lucida caudæ australis	2	28.47.50	♑ 20.44.35 A
H	In vastro	4	11.20.26	♈ 7.47.15 A
I	In fronte orientalis	4	8.9.3	♈ 6.35.24 A
K	In fronte occidentalis	4	3.42.34	♈ 5.51.53 A
L	Ad oculum sequens	4	4.37.31	♈ 9.11.30 A
M	In occipite	4	0.17.3	♈ 4.16.35 A
N	In quadr. pect. præced. bor.	4	25.59.6	♑ 25.38.19 A
O	In quadr. pect. præced. Austr.	4	26.24.21	♑ 28.30.32 A
P	In quadr. pect. seq. borealis	3	29.38.31	♑ 25.59.30 A
Q	In quadr. pect. seq. australis	3	0.2.1	♑ 28.35.0 A
R	Borea et suprema ventris sequens	3	18.30.54	♑ 20.38.41 A
S	Ventris tertia alia: media f. secunda	3	19.32.30	♑ 24.54.34 A
T	Infima in ventre	4	15.31.6	♑ 30.39.56 A
V	Nova in collo ceti	2	27.46.42	♓ 3.54.56 A
a	Ad oculum præcedens	6	4.31.38	♈ 28.32.4 A
b	Genam præcedens	6	29.30.28	♓ 31.35 A
c	In collo ceti australis	6	29.29.6	♓ 2.53.40 A
d	In collo ceti borealis	6	24.58.26	♓ 1.50.46 A
e	In cervice superior sub nodo lini	6	26.8.36	♓ 5.43.48 A
f	In cervice inferior præcedens novam	6	26.8.36	♓ 4.43.48 A
g	In Triang. caudæ præcedens	5	20.1.31	♑ 0.8.45 A
h	In Triang. caudæ seqq superior	5	22.38.6	♑ 25.15.39 A
i	In Triang caudæ seqq. inferior	5	22.5.36	♑ 28.48.48 A
k	In quadr. caudæ infer. præcedens	5	24.38.53	♑ 29.39.33 A
l	In quadr. caudæ inferiorui sequens	5	25.16.41	♑ 29.2.1 A
m	In quadr. caudæ superiorui præcedens	5	24.36.41	♑ 27.7.3 A
n	In quadr. caudæ superiorui sequens	5	25.27.21	♑ 25.53.31 A
o	In vertice	5	3.19.58	♓ 3.39.24 A
q	Boream ventris præcedens	5	17.36.36	♈ 0.26.10 A
r	Medium ventris præcedens	3	20.31.51	♈ 1.47.26 A
s	Trium ad caudam prima	6	2.30.21	♈ 14.4.0 A
t	Trium ad caudam secunda	5	3.33.53	♈ 16.43.39 A
u	Trium ad caudam ultima	6	4.43.51	♈ 15.52.36 A
w	In Gibbo dorsi	5	20.37.9	♓ 3.39.9 A
	ERIDANUS.			
Q	A secundo flexu quinta	4	7.9.23	♉ 23.45.5 A
R	In tertio flexu	3	5.1.29	♉ 23.31.49 A
S	In quarto flexu borealis	4	28.39.1	♉ 24.33.1 A
T	In quarto flexu australis	4	28.53.8	♉ 25.30.9 A
V	Post IV. flexum prima	4	0.54.24	♉ 28.56.38 A
z	Parvula huic contigua	6	29.35.0	♉ 3.52.0 A
	GRUS.			
A	Caput gruis	3	13.40.0	♒ 22.55.0 A
	PHŒNIX.			
A	In capite lucida	2	11.36.0	♑ 40.33.0 A
B	In collo	4	10.39.0	♑ 41.45.0 A
E	In ala sinistra trium media	5	1.4.0	♑ 36.3.0 A
F	borealis	5	1.25.0	♑ 31.39.0 A

GLOBI COELESTIS IN TABU… S PLANAS REDACTI PARS III.

in qua Longitudines Stellarum fixarum ad annum Christi com… 1730 tam Arithmetice quam Geometrice exhibentur

a IOH. GABR. DOPPELMAYR MATH. P.P. Academ. Cæs. L… Cur. Nat. Curiosorum, nec non Societatis Regiæ Borussicæ Socio

Operâ IOH. BAPT. HOMAN… Cæs. Maj. Geogr. Norimbergæ.

Cum Privil. Sac. Cæs. Majest.

	PERSEUS.	M	ao Long.	Latitudo
E	Dextri pedis sequens	3	59.23.43	20.18. 5 B
F	In planta sinistri pedis	5	4.48.35	11.18.52 B
G	In dextra tibia	5	3.16.43	11.15.52 B
H	In dextro calaneo dext. ped. prec.	4	47.43. 5	12.9.38 B
I	Supra dextr. calcan. sequens	6	27.20.41	6.24. 0 B
K	Supra dextr. colcan. sequens	6	29.22.56	11.31.29 B
L	Infra calc. sinistr. ad poplit. dextr.	5	5.23.53.	11.18.53. B
M	Sub sinistro pede Perf. ante sup.	6	5.23.32.	11.14.23 B
N	Sub sinistro pede medial.	6	5.30.49.	11.20.34 B
O	Inferior et minor.	6	6.4. 20	10.33.37. B
P	In talo pedis dextri	6	28.30.13	10.28.43.35 B
	AURIGA.			
B	Humerus sinister	2	26.8.55.	22.27.38 B
C	Brachium sinistrum	3	26.9.46.	13.35.6 B
D	Pes dexter	3	28.33.33	11.25.47 B
E	Hœdus præcedens	4	29.54.47	11.8.8.50 B
F	Hœdus sequens	4	15.40.19	11.8.36.1. B
G	Capræ Hodi	4	25.5.43	12.0.14.38 B
H	In tergo horealis	5	18.52.24	12.8.33.39 B
I	In tergo media	5	18.3.35	12.6.58.22 B
K	In tergo austral. ad manum dext.	5	16.53.34	12.5.23.57 B
L	Supra sinistrum clunem	5	10.25.33	11.24.3.37 B
M	Ad dextrum clunem	5	13.12.56.	11.25.5.47 B
N	Sub dextra manu boreali præced.	5	24.4.42.	11.24.53.53 B
O	Sub dextra manu austr.	5	24.24.9	11.24.2.59 B
P	Supra sinistr. cubitum præcedens	5	28.21.48	11.25.51.52 B
Q	Supra sinistr. cubitum sequens	5	29.33.11.	11.25.42.39 B
R	In sinistro cubito parva	6	29.38.49	11.31.49.47 B
S	In sinistro femore	5	29.27.30.	12.31.4. B
T	Ad dextrum genu	5	20.26.38	11.8.52.43 B
V	Sinistrum genu	5	29.37.54	12.6.6.52. B
X	Sub sinistro pede infermis prima	5	23.44.52	12.27.57.51 B
Y	Sub sinist. pede secunda	5	23.46.38	11.5.18. B
Z	tertia	5	24.38.34	11.4.7.46. B
a	quarta	5	25.49.37	12.2.47. 0 B
b	In extremitate sinist. pedis	5	28.39.3.	12.4.40.44 B
c	In sinistr. brach. sub axilla	6	26.44.39	13.5.28 B
d	In dextro femore sup. præced.	6	17.8. 22	11.11.36.49 B
e	In dextro femore trium media	6	17.44.20	11.17.18. B
f	In dextro femore trium inferior	6	17.33.3.	11.10.21.46 B
g	In dextra tibia	6	16.51.40	11.8.12.46 B
h	In sinistra supra	6	21.40.27	11.6.49.12 B
i	In sinistro calcaneo	6	17.36.39	11.5.17.53. B
q	In flagello ad man. sinistr.	6	3.59.48	6.9.35.17. B
	LYNX s. TIGRIS.			
Q	Ad dextrum genu posterior	6	27.38.45	6.9.17.6 3. B
	ARIES.			
R	Ultima s. tertia caudæ	6	29.38.43	12.32.46 B
Z	Extrema caudæ s. quarta	6	29.53.31	12.2.6.44 B
	TAURUS.			
A	Palilicium. Aldebaran	1	6. 2.39.	5.29.24 A
B	Cornu borcum	2	28.48.52	5.20.36 B
C	Cornu austrinum	3	21. 2.13.	12.35.48 A
D	Oculus borealis	3	24.53.20	12.36.20 A
E	Succularum prima	3	2.4.38	5.45.6. A
F	Succularum sequ. borealis præced.	3	3.6.52.	4.4.0.29 A
G	Succularum sequ. australis	3	4.0.32.	3.55.53 A
H	In armo sinistro suprema	5	30.0.43	5.5.56. 44 A
	secunda	6	29.20.39	7.28.7. A
	tertia	6	28.9.45	8.48.49 A
	infima	6	27.25.15	9.21.33 A
M	Quæ sequitur tertiam in armo	6	29.55.39.	9.31.0. A
N	In pede sinistro præcedens	6	21.49.53	3.13.29.57 A
O	In pede sinistro sequens	4	26.30.34	2.24.40.34 A
P	In paleari præcedens	5	1.36.38	3.8.42.53 A
Q	In paleari sequens	5	26.54.50	3.7.59.33 A
R	In pede dextro	4	29.59.38	0.32.36 A
S	In dextro poplite præcedens	5	0.7. 1.	0.11.59.48 A
T	In dextro poplite sequens	5	5.3. 12.	0.13.46.38 A
V	In dextro arma superior	5	3.46.40	0.8.39.36 A
W	In dextro genu sub Palilicio	5	5.58.22	0.19.31.54 A
X	Vergiliarum suprema	5	1.33.29.	1.7.55.31 A
	media	5	1.12. 51	1.6.38.34 B
	infima	6	1.38.23	1.5.16.38 B
Y	Ad aurem boream superior	4	4.40.58	2.25.44.58 B
Z	Ad aurem boream inferior	5	5.21.35.	2.1.39.47 B
a	In collo præcedens	5	29.43.25	3.13.38.39 B
b	In collo sequens ad genam	6	0.39.53.	2.0.53.57 A
c	In temporibus superior	6	4.54.33.	2.1.2.17 B
d	In temporibus inferior	4	3.25.57.	2.0.34.35 B
e	Trui infra fuscellas præced.	3	3.33.7.	1.6.56.33 A
f	Trium infra fuscellas media	5	5.15.37.	2.7.0.8. A
g	Trium infra fuscellas ultima	5	6.24.53	2.10.32.18 A
h	In fronte borealis	5	8.24.27	2.0.40.34 B
i	In fronte australis	5	10.0.0.	2.3.40.34 A
k	Ad radicem cornu austr. superior	4	11.8. 4.	2.3.36.37 A
l	Ad radicem cornu austr. trui media	4	9.4.4.	2.24.33.A
m	In medio cornu austr. præc. austr.	6	16.49.30	2.1.3.35. A
n	In medio cornu australis	6	18.43.43	2.17.39.58 A
o	Lucida Pleiadis	6	28.56.32	3.14.3.18. B
p	In cuspide Occident. Plejadum	3	25.56.21	3.14.39.1. B
q	In cuspide Orient. Plejadum	6	26.7.37	3.13.52.5. B
r	Lucidæ proxime præcedens	6	29.8.30	3.13.52.35 B
s	Inferiorum præcedens Pleiadu	5	25.51.25	3.14.6.53 B
t	Inferiorum sequens Pleiadum	5	25.52.21	3.13.55.46 B
u	Sucularum sequ. bor. sequens	6	3.46.35.	3.3.42.30 A
x	Ad radic. cornu austr. infima	6	17.31.52	2.24.38.37 A
y	Sub cornu austr. sequens	6	19.42.16.	2.4.43.45 A
z	Sub cornu australis præcedens	6	17.43.39.	2.3.42.2. A
a	In tergo supra Pleiadas	6	11.12.28	3.20.17.B
b	Inter ped. dext. Tauri et clypeum			
c	Orionis inferior	6	7.51.22.	1.30.48.55.B
	GEMINI.			
A	Castor	2	26.29.40	10.30. 4.43 B
B	Pollux	2	29.33.3.	6.46.40.19 B
C	Lucidus pes	2	3.20.47.	6.46.46.27 A
D	Cadit Castoris	1	3.33.29.	6.0.34.9. A
E	Parva prope Castorem	3	30.20.8	8.9.42.36 B
F	Parva prope Pollucem	3	28.31.22	6.7.26.9. B
G	Dextra manus Castoris	3	7.22.31.	6.11.0.32 B
H	Dextra Scapula Castoris	3	11.41.24	6.7.42.50 B
I	Humerus finister Castoris	3	15.32.31	6.9.3.42.52 B
K	Parva juxta humerum sinistrum	3	16.3.40.	6.6.30.20 B
L	Ad finistrum brachium Castoris	3	17.35.51	6.9.32.36. B
M	Humeris dexter Pollucis	3	19.35.34	6.9.31.1.30. B
N	Sinistrum latus Castoris	3	19.6.29	6.2.35.56 B
O	In dextro latere Castoris	3	20.29.39	6.9.2.30.7 B
P	Ad finistrum genu Pollucis	3	8.12.39.	6.0.1.31.58 A
Q	Venter Pollucis	3	14.46.53	6.2.34.37 B
R	Supremum genu Castoris	3	16.9. 20.	6.9.1.39.38 B
S	Dextrum genu Pollucis	3	17.16.17	6.9.6.48. A
T	In sinistro Pollucis	3	18.12.43	6.5.30.43 A
V	Ad podicem Pollucis	3	18.30.39	6.5.0.39 A
W	Propus	4	27.33.39	8.0.39.26 A
X	Proxcd. in dext. pede Castoris	4	29.42.27	8.0.57.32 A
Y	In sinistro pede Castoris	3	3.4. 2.	6.3.7.21 A
Z	In extremitate dextri pedis Pollucis	4	27.22.49	6.9.0.8.43 A
a	Dexter calcaneus Pollucis	6	0.44.59	10.9.39.35 A
b	A Tergo Pollucis infima	6	29.56.11	6.6.3.49.20 A
c	A Tergo Pollucis media	6	21.10.18	6.4.3.51.20 A
d	A Tergo Pollycis suprema	6	23.18.24	6.9.0.56.28 A
e	Dextra manus Pollucis	5	21.30.54	6.5.43.51.B
f	In sinistra manu Castoris	6	17.13.29	6.0.0.48.53 A
g	In flabello Castoris media	6	10.31.2.	6.9.6.34.57 A
h	In flagello Castoris superior	6	12.59.5.	6.9.8.29.53 B
i	In flagello Castoris infer. et austr.	6	13.7.3.	6.9.8.29.51 B
k	In plumula Castoris inferior	6	16.48.34	6.9.4.54.53 B
l	In plumula Castoris superior	6	18.38. 8	6.9.3.7.29 B
m	In pumula Pollucis	6	18.37.18	6.9.8.3.20 B
n	In clava Pollucis inferior	6	23.39.21	6.9.13.24. B
o	In clava Pollucis superior	6	25.24.39	6.9.9.31.33. B
	CANCER.			
A	Brachium australium	3	9.52.39.	0.3.7.39. A
B	Sub cauda	N	0.30.51.	0.30.39.43 A
C	Præsepe	N	3.32.11.	0.1.15.43. B
D	Asellus borcus	3	3.46.29.	0.3.8. 26.B
E	Asellus australis	4	4. 5.18.	0.0.3.5. A
F	Oculus borealis Tych. in probosside	6	7.16.40.	0.7.19.24 B
G	Oculus australis Tych. in probosside	6	9.27.43.	0.5.22.31 B
H	In brachio boreali superior	5	2.34.9.	0.10.23.15 B
I	In ultimo pede boreali inferior	5	25.40.57	0.1.38. 0. B
K	In radice caudæ	4	27.38.18	0.22.38.42 A
L	In dorso borealis	4	1.38. 1.	0.1.30.38 B
M	In dorso australis	4	1.58.31	0.0.48.36 A
N	Inter in dorso et præced.	4	0. 0. 3.	0.0.3.48 A
O	In brachio austr. super. obscura	6	8.36.18	0.3.1.40 A
P	In cheli Australis	4	12.24.58	0.3.36.38 A
Q	In media cauda	5	26.30.31	0.7.9.0. A
R	Extrema caudæ	5	26.36.31	0.6.7.0. A
S	In brachio bor. infer. austr.	6	1.38.26.	0.9.23.26 A
T	In secundo pede australi	6	6.28.21.	0.7.46.0. A
V	In tertio pede australi	6	1.29.33.	0.8.39.4. A
W	In ultimo pede australi	6	3.0.55.	0.11.30.53 A
X	Ad extremitatem caudæ sequens	6	18.30.4	0.9.44.16 A
Y	Ad extremitatem caudæ præced.	6	17.18.3.	0.8.37.49. A
Z	In ultimo pede boreali superior	7	25.26.21	0.9.5.44.2. B
a	In penultimo pede boreali	6	27.14.28	0.7.27.31. B
b	In medio pede boreali	6	28.44.24	0.7.30.31. B
c	In latere boreali ad ped. sec. bor.	6	1.32.30.	0.7.11.41.B
d	Supra chelam Austr.	6	13.28.34	0.0.48.35 A
e	In chela borea	6	4.16. 6.	0.14.31.31. B
	ERIDANUS.			
A	Clara in principio	3	11.33.15.	0.27.53.47.A
B	Infima in principio	4	11.30.52.	1.31.34.36 A
	secunda	5	9.34.57	0.29.48.51.A
	tertia	5	7.17. 37.	0.27.51.32.A
	quarta	4	5.36.52	0.25.23.33.A
C	In primo flexu	3	3.6.27.	0.25.0.0. A
D	A flexu I. prima	3	29.33.21	0.25.7. 30.A
E	Secunda	4	26.40.38	0.28.32.29.A
F	tertia	4	25.48.24	0.27.20.37.A
G	quarta	5	25.37.31.	0.30.52.12.A
H	In II. flexu infima	3	20.6.48.	0.33.32.2. A
I	A II. flexu prima	3	17.38.7.	0.31.30.40.A
K	secunda	3	17.7.33.	0.28.51.51.A
L	tertia	3	16.18.7.	0.27.37.14.A
M	quarta	3	16.7.42.	0.25.58.34.A
N	Post IV. flexum secunda	4	6.38.58	0.38.28.42.A
O	Ad hanc flexura	6	5.40.0.	0.39.7.0. A
P	Post IV. flexum tertia	4	10.28.3.	0.39.26.22.A
Q	quarta	4	13.23.36	0.41.35.22.A
R	quinta	3	13.52.23.	0.43.43.46.A
S	sexta	5	15.40.39	0.44.44.38.A
T	septima	6	17.38.13.	0.43.30.38.A
V	Sub Eridano ad ped. dextr. Ceti	6	0.48.51.	0.55.51.34.A
X	Versus ortu duarum conjunctarū			
Y	Iterea vel in V. flexu	4	25.45.0.	0.50.56.0.A
Z	Earum australior	4	26.8.0.	0.51.50.0.A
a	Post reflexionem V. duarū sequens	4	29.40.0	0.54.32.0.A
b	Earum procedens	4	28.43.0.	0.53.58.0.A
c	Inquisitor has præcedenti seq.	4	10.36.0.	0.53.35.0.A
d	Media	4	8. 3.0.	0.54.39.0.A
e	Australior præcedentium	4	6.32.0.	0.55.33.0.A
f	Omnes quatuor præcedens	4	5.11.0.	0.54.50.0.A

	ORION.	M	ao Long.	Latitudo
A	Humerus sinister	1	0.1.30.	16.1.52.A
B	Humerus dexter	2	17.32.45	13.56.31.A
C	Rigel	1	13.6.47	31.0.26.A
D	Pes sinister	3	22.39.47	13.1.5.54.A
E	Cingul. prima	3	16.36.47	13.3.35.7.A
F	Cingul. secunde vel media	2	20.43.1.	13.2.32.26.A
G	Cingul. ultima	3	22.57.13	13.0.5.34.A
H	In manu pro ense	3	16.24.45	12.45.33.48.A
I	Infima in ense	3	19.38.54	12.49.16.3.A
K	Media in ense	3	19.9.3.	12.48.42.32.A
L	Suprema in ense	3	19.25.13	12.48.30.37.A
M	In limbo clypei suprema	5	2.42.53	12.8.35.30.A
	secunda	5	30.38.28	12.4.4.38.A
	tertia	5	30.6.31	12.1.30.26.A
	quarta	5	0.31.53	11.28.23.44.A
	quinta	5	8.38.13	13.13.31.8.A
	sexta	5	8.18.33	13.11.8.4.A
	septima	5	8.22. 2.	12.56.49.2.A
	octava	5	8.44.6.	12.40.2.8.A
	infima	5	9.47.56.	12.20.30.55.A
N	In dextro cubito borealis	6	11.1.48.	11.13.32.15.A
O	In dextro cubito australis	6	12.59.0.	11.14.24.2.A
P	In medio clupeo	6	15.33.39	11.11.43.33.A
Q	In imo limbo orientali	4	15.52.0.	12.20.8.38.A
R	In capite præcedens borealis	5	10.58.3.	11.13.24.46.A
S	In capite præcedens australis	5	9.51.35	11.1.50.36.A
T	In capite sequens	5	20.29.17	12.18.2.36.A
V	Parvo juxta dextrum humerum	5	8.38.40	12.17.20.28.A
X	Parvo juxta sinist. humerum	5	26.43. 0.	0.13.36.22.A
Y	Sub dextra axilla prima	6	16.22.43	13.39.37.52.A
Z	secunda	6	17.25.32	13.41.8.46.A
a	tertia	6	18.38. 3	13.20.3.35.A
b	quarta	6	19.20.55	13.19.33.36.A
c	quinta	6	20.46.38	13.18.10.41.A
d	In dextro latere	6	21.16.48	13.21.20.32.A
e	Sub dextro latere in coxa præced	5	15.40.15	12.43.33.56.A
f	Sub dextro latere in coxa seq.	6	16.30.55	12.24.0.39.A
g	Quæ sub ultima cingul.	6	20.30.29	12.28.59.54.A
h	In sinistro humero	6	22.33.32	12.21.54.32.A
i	In latere sinistro	6	24.33.9.	13.21.36.38.A
k	Ad sinistrum latus	6	25.48.37	12.22.36.20.A
l	In sinistro brachio	6	0.36.26	10.1.9.52.A
m	In sinistra manu infer. proced.	6	28.7.18.	11.8.42.24.A
n	In sinistra manu infer sequens	6	29.31.44	12.0.14.32.A
o	In sinistra manu superior præced	6	29.21.2.	11.29.34.35.A
p	In sinistra manu superior sequens	6	29.50.1.	12.7.38.33.A
q	In clava præcedens	6	24.52.36	13.11.44.A
r	In clava intermedia	6	26.16.32	13.13.11.A
s	In clava sequens	6	27.12.25	13.23.39.A
t	Prope Rigel vel in pede sin. super	6	14.8.31.	10.24.57.0.A
u	Prope Rigel in pede dextro inferior	6	15.51.33	11.30.56.47.A
x	Inter pedes	6	18.21.30	11.30.36.17.A
y	In vagina prima et superior	6	20.11.0.	11.30.37.45.A
z	In cubito sinistro	6	0.38.43	6.13.31.51.A
a	In dextra manu præcedens	6	24.48.27	12.49.37.5.A
b	In dextra manu sequens	6	24.4.28	12.20.50.2.A
c	In vagina secunda	6	24.58.17	12.34.59. 0.A
d	In cuspide vaginæ s. ultima	6	25.25.44	12.47.0. 0.A
e	In vagina tertia	6	26.16.32	13.13.11.A
f	In vagina quarta	6	26.51.30	13.14.4.54.A
g	In crista galeæ inferior	6	29.24.46	12.58.58.2.A
h	In crista galeæ superior	6	27.26.49	12.51.33.A
	CANIS MINOR.			
A	Procyon	1	22. 6.38	6.36.51.A
B	In Rolle	3	18.28.30	6.9.23.36.A
C	Supra lucidam colli sequens	6	18.34.30	6.9.8.51.21.A
D	Supra lucidam colli præcedens	6	17.54.43	6.9.8.38.9.A
E	In pede dextro anter. inferiori	6	20.45.1.	6.9.38.37.A
F	In pede dextro anteriori superiori	6	23.5. 9.	6.9.38.23.A
G	In dextro femore	6	28.8.55	6.9.4.39.0.A
H	In pectore	6	28.39.24	6.9.36.4.A
I	In pede sinistro posteriori	5	25.53.29	6.9.18.54.A
K	Inter pedes posteriores	6	27.51.3.	6.9.18.4.49.A
L	In pede dextro posteriori	5	28.28.17	6.9.17.48.52.A
M	In cauda	5	29.48.30	6.9.10.46.A
N	In ungula dextri pedis posteriori	5	0.22.4	6.9.9.55.46.A
	HYDRA.			
B	In capite prima	4	6.34.47	0.21.25.0 A
C	Quæ est a capite Hydræ ad Aufrii	4	6.8.0.	0.22.28.0.A
D	In capite media	4	8.37.8.	0.21.7.20.A
E	In capite ultima	4	8.30.36	0.20.28.4
F	In inferiori maxilla præcedens	3	7.33.55	0.19.35.20.A
G	In inferiori maxilla sequens	4	8.32.34	0.19.16.35.A
H	Quæ sub media capitis	4	9.2.0.	0.19.25.0.A
I	In occipite	4	13.38.47	0.21.2.38.A
K	In eductione colli ad aurem	4	16.31.35	0.23.3.35.A
k	Sub capite hydræ inform. sup. prec.	4	19.22.21	0.20.43.A
l	Post ipsum I. prima	6	18.56.9	0.21.17.46.A
	CETUS.			
V	Sub rostro	4	8.34.47	0.34.20.23.A
X	Supra linguam	4	8.18.17. 9	0.38.20.26.A
Y	Sub lingua media	6	27.55.30.	0.20.45.35.A
Z	Sub lingua sequens et ultima	6	28.7.38.	0.21.57.0.A
p	Sub litigua præcedens	6	27.40.35	0.24.0.43.A
	LEPUS.			
A	In medio corpore	3	17.40.21	0.43.5.27.A
B	In armo dextro	3	15.57.18	0.45.55.26.A
C	In pede post. proced. australis	6	2.27.22	0.56.5.8. B
D	In pede posteriori sequens bor.	6	23.28.23	0.55.35.20.A
E	Præcedens auris superior	6	21.24.5	0.58.44.30.A
F	Præcedens auris inferior	6	21.25.56	0.55.53.40.A
G	Sequentis auris superior	6	19.27.53	0.55.22.36.A
H	Sequentis auris inferior	6	18.8.30	0.55.2.36.A
I	Oculus	6	21.40.26	0.56.8.A
K	Extrema pedum priorum	6	18.22. 1.	0.48.30.38.A
L	In signa dorsi præcedens	5	22.36.54	0.48.20.A
M	In signa dorsi media	5	22.33.33	0.48.38.0.A
N	In signa dorsi ultima	5	22.28.13	0.48.55.0.A
O	Ante leporem præcedentiu infer.	6	0.59.53	0.48.32.37.A
P	Ante leporem præcedentiu media	6	1.35. 6	0.46.0.0.A
Q	Ante leporem præcedent. suprema	6	2.10.32	0.46.0.0.A
	CANIS MAJOR.			
A	Sirius	1	10.25.30	6.30.30.5.A
B	Externa dextri pedis prioris	4	3.30.34.	6.43.36.6.A
C	Ad dextram aurem	3	17.2.8.	6.45.41.27.A
D	In tergo	3	19.46.8.	6.37.59.58.A
E	Inter femora vel infima ventris	3	21.7.2.	6.45.1.27.A
F	Ante caudæ	3	23.40.0	6.33.28.30.A
G	Extrema pedis posteriores	3	3.43.32	6.50.31.40.A
H	In fronte bor. ad fin. aurem	3	25.37.6	6.54.36.48.A
I	In fronte australior	3	23.27.6	6.43.36.48.A
K	Supra collum ad genam	3	13.31.25	6.50.30.32.A
L	In collo f. armilla Tych. in hum.	4	14.31.31	6.9.42.47.30.A
M	Ad genu et armum finistrum	4	8.3.3.	6.50.52.38.A
N	In armo dextro præcedens	4	7.3.5.	6.9.46.34.30.A
O	In armo dextro sequens	5	8. 0. 27	6.9.46.3.16 A
P	Ad humerum	5	17.39.41	6.9.47.7.52.A
Q	In inferi	5	14.32.57	6.9.46.45.56.A
R	Supra genu finisterum	5	8.20.53	6.9.41.37.17.A
S	In ventre	5	17.53.4	6.9.51.36.0.A
T	Oculus finister	5	20.31.39	6.9.37.42.30.A
V	Ad tergum superior	5	22.43.5	6.9.46.28.32.A
W	Ad tergum inferior	5	23.53.47	6.9.48.28.32.A
X	Quæ in poplite canis	5	19.45.0.	6.9.55.8.0.A
	MONOCEROS.			
A	Ad aurem	4	6.38.30.	6.21.13.45.A
B	In cervice	5	8.45.35.	6.9.34.56.58.A
C	Ad oculum in fronte	5	8.40.30	6.9.18.53.28.A
D	In naribus	4	2.34.47	6.9.16.35.37.A
E	Ad genam	4	4.44.32	6.9.10.23.53.A
F	Ad collum	4	0.4.52.	6.9.20.32.29.A
G	In eductione colli	4	25.47.46	6.9.22.47.51.A
H	Inter pedes anteriores præcedens	6	0.33.35.	6.9.38.39.46.A
I	Inter pedes anteriores sequens	6	0.38.0.	6.9.38.3.7. A
K	In pede dextro anteriori sequens	4	4.33. 7.	6.9.20.37.31.A
L	In dextro femore ad educt. caudæ	4	6.20.35.	7.22.29.42.A
M	In cauda	4	11.20.30	7.23.2.20.42.A
N	In ventre	4	25.32.53	6.9.32.28.52.A
O	In pede dext. anteriori proced.	6	0.1.35.	6.9.31.31.0.A
P	In pectore præcedens	5	13.38.25	6.9.21.44.43.A
Q	In pectore sequens	5	16.1.41.	6.9.26.30.51.A
R	In latere præcedens	5	23.20.8	6.9.25.22.8.0.A
S	In latere sequens sub tergo	5	29.14.39	6.9.21.43.42.A
T	In tergo	5	29.7.27.	6.9.17.28.20.A
	COLUMBA NOACHI.			
A	Procedens lucidarii f. ad ala. sin.	2	28.32.0.	11.37.25.0.A
B	Sequens lucidarii f. in colla præc.	2	22.46.0.	11.25.15.0.A
C	Præcedens omnes in columba	3	15.0.0.	11.28.30.0.A
D	Borea omnium f. ad alam dextr.	6	21.6.0.	11.33.45.0.A
E	Quæ sequitur præcedentes f. scuta. rum f. in tergo	5	23.43.0.	11.37.15.0.A
F	Quæ sequitur sequentem lucida. rum f. in collo sequens	5	25.25.0.	11.28.35.0.A
G	Quæ in capite Columbæ	5	29.26.0.	11.00.41.0.A
H	Prima in ramo	5	2.50.0.	0.9.38.31.0.A
I	Secunda in ramo	5	5.43.0.	0.9.16.44.0.A
K	Ultima in ramo	5	8.35.0.	0.9.53.40.0.A
	ARGO NAVIS.			
A	In clypeo superiori præcedens	3	2.39.46	0.44.57.20.A
B	In superiori puppi clarior et sequi	3	7.50.0.	0.43.39.54.A
C	In aplustri	3	4.33.8.	0.32.9.30.A
D	In clypeo navis in feriori præced	6	29.54.35	0.47.25.35.A
E	Auffrius f. in clyp. inferiori sequs	6	2.21. 0.	0.46.3.0.A
F	Quæ sequitur ad Aufrii f. in clypeo inferiorum sequens	4	2. 0.0.	0.46.31.0.A
G	Quæ est supremo puppis oraculo	6	7.35.0.	0.44.39.0.A
H	In carina puppis f. potius in pos. dextro pofter. canis majoris	3	26.37.0	0.0.58.30.0.A
I	In fabi puppi f. prui præcedentis	5	5.21.0.	0.58.25.0.A
K	In superiori puppi f. præcedentis magarum in primo fcuto præced.	5	5.21.0.	0.58.25.0.A
L	Media Hevel. trium fuperiorū in primo fcuto præcedens	4	7.30.0	0.57.43.0.A
M	Trui f. fequi Hevel trui fuperiorū in primo fcuto media	5	30.39.0	0.58.3.0.A
N	Lucida in trinfero Hevel. trui fuperiorū in primo fcuto fequens	2	28.44.0	0.58.39.0.A
O	Hanc præcedens Hevel. mediarui in primo fcuto fequens	4	31.22.0	0.59.43.0.A
P	In medio mali duarui auftralis	4	23.5.0.	0.53.9.0.A
Q	Hevel in malo fuperiorū auftr.			
R	Borealis Hevel in malo fuperiori borealis	3	22.48.0	0.48.55.0.A
S	In fcuto velo præcedens	4	21.47.0	0.43.37.0.A
T	In fumo velo fequens	5	23.7.0	0.42.51.0.A
V	Inter remos in carina Hevel in primo fcuto omnis f. inferior	5	5.3.0.	0.53.46.0.A
W	In extrema navi duarui præced.	5	9.55.0	0.48.36.0.A
X	In fuprema puppi præcedens			
Y	Borea in temarii Hevel in oculo f. fpeculo navis	3	13.27.0.	0.0.0.3.0.A
Z	Quæ hanc præcedit informi. Hevel ad gubernacula in fpeculo	5	9.46.0.	0.0.0.11.0.A

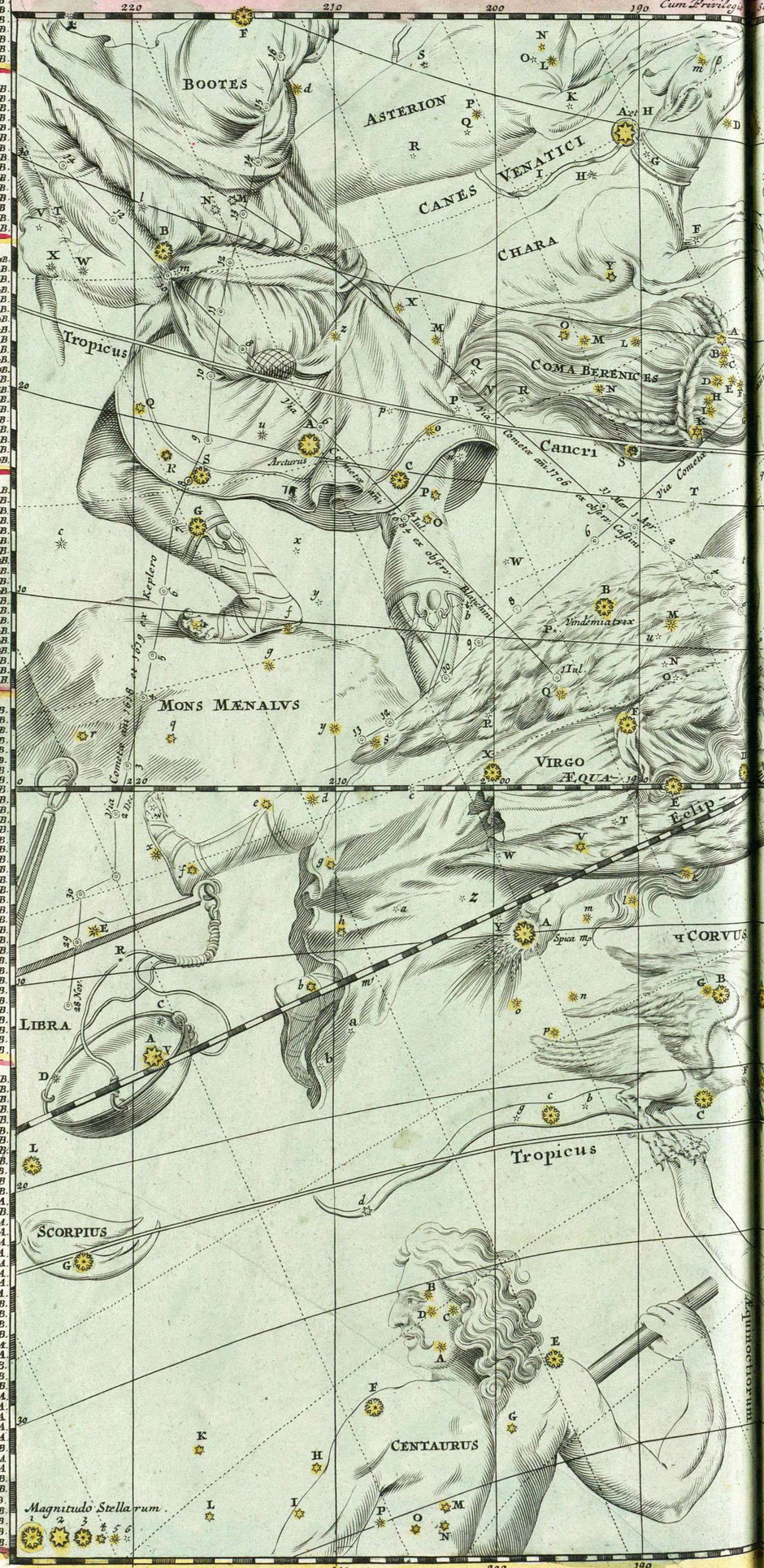
GLOBI COELESTIS IN TABU[LAS] PLANAS REDACTI PARS IV.

in qua Longitudines Stellarum fixarum ad annum Christi comp[letum] 1730 tam Arithmeticè quam Geometrice exhibentur

à Ioh. Gabr. Doppelmayr Math. P.P. Academ. Cæs. Leop[old.] Car: Nat: Curiosorum nec non Societatis Regiæ Borussice Socio

Operâ Ioh: Bapt: Homan[n] Sac: Cæs: Maj: Geogr: Norimbergæ.

Cum Privilegio Sac. Cæs. Majestat.



Lynx

		Mag.	Long.	Lat.
T	In cauda ultima s. ad dicken bor. Gr.	3	8. 5. 45	Q 17. 57. 38 B

Leo Minor

D	In dnce dext. pedis anterioris	6	9. 52. 22	Q 18. 29. 46 B
E	In collo	4	17. 11. 03	Q 22. 3. 49 B.
F	Cor leonis minoris	6	17. 29. 53	Q 18. 37. 6 B
G	In ventre	6	21. 38. 9	Q 17. 22. 48 B
H	Ad cervicem s. supra cap. Q sequ. sup.	4	20. 56. 2	Q 25. 8. 19 B
I	Sub cervice s. supra capr. Q sequ. med.	3	21. 18. 19	Q 23. 30. 6 B
K	In medio corpore	3	25. 8. 24	Q 21. 37. 0 B
L	In tergo precedens	6	28. 57. 11	Q 18. 56. 38 B
M	In tergo sequens	4	27. 21. 38	Q 23. 18. 3 B
N	In coxa	3	27. 9. 18	Q 21. 3. 54 B
O	In dextro pede post. prec. ad ung.	6	28. 23. 23	Q 26. 59. 0 B
P	In dextro pede post. sequens	5	1. 44. 41	Q 26. 30. 28 B
Q	Inter pedem sinistrum et caudam	6	6. 39. 31	Q 27. 38. 54 B
R	In medio caudæ vel sup. dorsum Q tertia	6	6. 41. 1	Q 26. 47. 38 B
S	In extremitate caudæ	6	29. 55. 8	Q 23. 57. 8 B

Ursa Maior

H	Informis sub cauda s. in ansulo Arm. Charæ	2	20. 46. 57	m 4. 7. 23 B.
K	In ungula pedis post. sinist. borealis	5	6. 45. 1	m 2. 6. 7 39 B
l	In ungula pedis post. sinistr. australis	5	3. 39. 21	m 4. 4. 59 39 B
m	Præced. infer. sub cauda in fronte Charæ	3	13. 57. 8	m 30. 31. 59 B
n	In ungula dextri pedis post. trium seq.	5	20. 3. 16	Q 28. 49. 20 B
o	Duarum sub genu sequens	5	20. 54. 1	m 0. 16. 5. 31 B
p	Duarum sub genu præcedens	5	25. 38. 31	Q 21. 0. 30 B
q	Duarum inter ped. post. sequens	5	0. 22. 51	m 30. 45. 30 B
r	Duarum inter ped. præcedens	7	27. 36. 59	Q 29. 38. 0 B
s	Supra dext. genu pedis posteriorii	6	1. 49. 32	m 24. 36. 19 B
t	Sub femore sinistro pedis posteriorii	5	6. 13. 51	m 3. 8. 37. 25 B
u	In poplite pedis s. post. trium superior.	6	12. 25. 51	m 30. 48. 49 B
	media	6	8. 38. 9	m 30. 57. 46 B
	infima præcedens	6	7. 0. 31	m 0. 49. 36. 20 B
	Sub pede sinistro posteriori	6	8. 30. 39	m 26. 0. 53 B.

Coma Berenices

A	Intra coronam suprema	5	20. 9. 33	m 28. 49. 56 B
B	Intra coronam secunda	5	20. 37. 31	m 27. 30. 16 B
C	Intra coronam tertia	5	20. 50. 31	m 27. 7. 18 B.
D	Intra coronant quarta	5	21. 33. 33	m 26. 30. 30 B
E	Intra coronam quinta	5	20. 35. 33	m 26. 6. 30 B
F	Intra coronam sexta B.	5	20. 51. 33	m 25. 46. 17 B.
G	Intra coronam infima	5	19. 54. 33	m 28. 28. 59 B
H	Ad limbum orientalem borealis	5	20. 31. 56	m 25. 31. 30 B
I	Ad limbum orientalem australis	5	20. 23. 39	m 25. 0. 2 B
K	In limbo orientali	5	23. 51. 51	m 24. 9. 5 B
L	In coma præcedens	5	26. 3. 21	m 23. 19. 30 B.
M	Duarum seqq. bor. vel boreal. media	5	29. 38. 42	m 21. 53. 28 B.
N	Duarum seqq. australis	5	0. 3. 21	Q 29. 30. 0 B
O	Duarum seqq. ultima	5	0. 54. 19	m 21. 30. 30 B
P	Trium, extremarum ultima	6	m 1. 8. 33	Q 28. 49. 30 B
Q	Trium extremarum media	6	8. 31. 21	m 29. 15. 21 B
R	Trium extremarum præcedens	6	9. 55. 21	m 33. 17. 32 B
S	In coma australior	4	29. 35. 21	m 28. 33. 6 B.
T	Sub coma præcedens superior	6	26. 44. 21	m 24. 42. 22 B
V	Su coma sequens inferior	7	28. 58. 21	m 19. 37. 49 B
W	Sub coma ad pedem dextr. Bootis	6	11. 30. 21	Q 21. 46. 39 B

Canes Venatici Asterion & Chara

A	In annulo armillæ Charæ	2	20. 46. 57	m 5. 6. 7. 23 B
B	In fronte s. oculo Charæ	3	13. 57. 8	m 5. 6. 31. 47 B.
C	Sub capite Charæ præcedens	6	0. 54. 8	m 38. 6. 45 B.
D	Sub capite Charæ sequens	5	13. 46. 3	m 37. 44. 22 B.
E	In pede Charæ inter. dextro	5	19. 13. 44	m 33. 33. 30 B.
F	Inter pedes Charæ anteriores	6	18. 24. 51	m 33. 54. 9 B.
G	In Armilla Charæ	6	20. 0. 21	m 38. 57. 0 B
H	In tergo Charæ	4	24. 18. 21	m 38. 38. 28 B
I	Supra tergum Charæ inter Charæ et Asterion	6	28. 9. 51	m 39. 54. 30 B.
K	In pede dextro inter. Asterionis	6	23. 24. 6	m 41. 44. 56 B.
L	In pectore Asterionis inferior	5	23. 37. 31	m 43. 35. 2 B.
M	In femore Charæ	5	0. 57. 33	Q 3. 7. 51 B.
N	In pectore Asterionis præcedens	6	23. 38. 1	m 44. 11. 55 B.
O	In pectore Asterionis sequens	6	28. 49. 33	m 44. 4. 30 B.
P	In latere Asterionis super. præced.	5	0. 21. 51	Q 0. 59. 59 B.
Q	In latere Asterionis infer. sequens	6	1. 40. 21	Q 29. 29. 58 B.
R	In ventre Asterionis	6	6. 17. 51	Q 29. 19. 58 B.
S	In tergo Asterionis sequens	6	9. 17. 21	Q 28. 51. 30 B.
T	In femore sub cauda Charæ	5	11. 32. 33	Q 36. 32. 22 B.
Y	In ventre Charæ	4	26. 19. 36	m 33. 59. 59 B

Bootes cum Monte Mænalo

A	Arcturus	1	20. 28. 27	Q 31. 3. 0. B.
B	Cingulum	3	24. 18. 21	Q 30. 41. 45 B.
C	Dextra cruris Tibia	3	15. 32. 55	Q 28. 8. 34 B.
F	Humerus dexter	3	11. 51. 30	Q 39. 35. 17 B.
G	Crus sinistrum	3	29. 15. 8	Q 27. 56. 38 B.
M	In dorso præced. borealis	4	28. 56. 56	Q 40. 30. 46 B.
N	In dorso sequens australis	4	22. 2. 42	Q 41. 11. 36 B.
O	Infima dextri cruris	4	18. 26. 36	Q 35. 13. 58 B.
P	Media dextri cruris	4	19. 13. 27	Q 36. 31. 30 B
Q	In sinistro femore borealis	4	29. 49. 6	Q 33. 49. 17 B.
R	In sinistro femore media	4	0. 21. 6	Q 31. 16. 36 B.
S	In sinistro femore infima	3	2. 8. 3. 21	Q 30. 24. 39 B.
T	In sinistra manu super. præced.	3	29. 42. 36	Q 49. 25. 0 B
V	In sinistra manu super. sequens	6	1. 8. 13. 11	Q 49. 52. B.
W	In sinistra manu infer. præced.	5	29. 50. 44	Q 50. 15. 23 B
X	In sinistra manu infer. sequens	5	1. 29. 32. 11	Q 50. 33. 6 B.
f	Sub sinistro calcaneo	5	26. 46. 31	Q 21. 27. 46 B
g	Sub planta sinistri pedis	5	27. 26. 36	Q 23. 9. 30 B.
k	Ad collum	6	28. 28. 36	Q 49. 38. 30 B.
l	Supra lucidam cinguli	5	29. 48. 31	Q 49. 31. 8 B.
m	Sub lucida cinguli	6	29. 46. 36	Q 49. 0. 59 B.
n	In fimbria tunicæ præcedens	6	11. 26. 9	Q 28. 13. 30 B.
o	In fimbria tunicæ media	5	13. 0. 21	Q 29. 29. 26 B.
p	In fimbria tunicæ seq. et super.	6	13. 2. 55	Q 31. 31. 34 B.
q	Sub sinistro pede prima in M. Man.	6	4. 45. 36	m 17. 9. 39. B.
r	Sub sinistro pede secunda	4	8. 50. 38	m 28. 36. 17. B.
u	Corner Arcturi	5	22. 9. 6	Q 31. 27. 54 B.
w	In fimbria Tunicæ sub Arcturo	3	22. 50. 53	Q 28. 28. 50 B.
x	Inter pedes superior	6	23. 55. 1	Q 28. 43. 1. B.
y	Inter pedes inferior	6	28. 2. 36	Q 28. 19. 3. B.
z	In dextra coxendice sequens	5	16. 31. 35	Q 39. 43. 33 B
a	In extremitate sinistri pedis	7	1. 25. 23.	m 20. 44. 1. B.
b	Ad pedem dextrum	6	18. 4. 21	Q 48. 51. 44 B.
c	Informi inter Bootem et cap. serp.	5	9. 59. 21.	m 37. 9. 15. B.
d	Sub dextro brachio in latere	5	12. 4. 21	Q 49. 31. 44 B.

Leo

A	Regulus	1	26. 3. 21	Q 0. 28. 44 B.
B	Lucida colli	2	28. 49. 21	Q 8. 48. 16 B.
C	Lucida dorsi	3	7. 31. 36	m 15. 40. 25 B.
D	Cauda	1	17. 53. 3	m 28. 28. 59 B.
E	In capite australis	3	26. 56. 39	Q 29. 40. 39. B.
F	In collo borealis	3	23. 48. 36	Q 11. 51. 43 B.
G	In collo australis	3	24. 3. 36	Q 14. 44. 57 B.
H	In ossa vel cozendice	3	5. 40. 21	m 3. 40. 30 B.
I	In naribus	4	11. 33. 21	Q 0. 46. 37 B.
K	In hiatu	4	15. 7 69.	Q 7. 56. 18 B.
L	In capite borealis	4	17. 51. 53.	Q 12. 40. 0 B
M	Media parvula capitis	6	18. 0. 36.	Q 10. 44. 9 B.
N	In drace sinistra	4	17. 59. 51	Q 3. 8. 44 A.
O	In sinistro armo	3	19. 42. 21	Q 0. 20. 44 B.
P	Parvarum in pectore australis	4	23. 36. 16	Q 0. 3. 31 A.
Q	In drace dextra austr. præced.	5	17. 58. 57	Q 7. 20. 58 A.
R	media	6	18. 26. 9	Q 7. 39. 18 A.
S	sequens	4	20. 29. 27	Q 8. 55. 0 A.
T	In dextro armo australis	4	25. 34. 8	Q 3. 55. 32 A.
V	In dextro armo borealis	5	26. 40. 19	Q 1. 25. 6. A.
W	In infimo ventre borealis	4	2. 39. 1.	m 0. 9. 37 A.
X	In medio corpore suprema	6	2. 3. 58.	m 30. 19. 59 A.
Y	media	6	3. 55. 51	m 5. 55. 32 B.
z	infima	6	5. 55. 36	m 2. 44. 19. B.
a	In dorso præcedens lucida	5	5. 3. 36	m 12. 52. 33 B.
b	Ad sinistrum genu borealis	3	10. 43. 44	m 3. 22. 3. B.
c	Ad sinistrum genu media	3	10. 53. 36	m 0. 12. 56. A.
d	Ad sinistrum genu australis	3	11. 3. 26	m 2. 49. 53 A.
e	In dextro femore borealis	6	10. 37. 6	m 7. 54. 45. B.
f	In dextro femore media	6	13. 47. 28	m 6. 8. 51. B.
q	In dextra femore australis	4	15. 57. 36	m 3. 44. 13 B.
h	Ad dextrum genu	4	17. 45. 33	m 0. 33. 35 A.
i	In dext. pede post. austr. præced	4	17. 43. 55	m 7. 37. 46 A.
k	In dextro pede media	5	20. 37. 57	m 5. 41. 10. A.
l	In dextro pede sequens borealis	4	21. 16. 44	m 3. 2. 50 A.
m	Penultima caudæ	3	19. 13. 6	m 17. 18. 7. A
n	Ad genam	5	21. 20. 1.	Q 29. 19. 4. B.
o	Inter pedes posteriores præced.	5	11. 49. 21	m 28. 28. 59 A.
p	Inter pedes posteriores sequens	6	18. 26. 15	m 7. 6. 13. A
q	In pectore boreali sequens	4	27. 29. 21	Q 28. 8. 2. B.
r	Caput vel ad frontem Q precedens	6	11. 24. 1.	Q 15. 44. 22. B.
s	In fronte Leonis	3	14. 8. 59.	Q 15. 19. 3. B.
t	Prima caudæ in eductione	4	18. 53. 1.	m 13. 53. 31 B.
u	Antepenultima caudæ	3	13. 7. 15.	m 17. 39. 31 B.
w	Suprema s. secunda cauda	6	9. 14. 21	m 23. 1. 57. B.
x	In imo ventre præcedens	6	9. 23. 41	m 0. 51. 13 B.

Virgo

A	Spica virginis	1	20. 4. 21	Q 19. 53. A.
B	Vindemiatrix	3	6. 12. 51	Q 16. 9. 3. B.
C	In ancone alæ australis	3	23. 13. 36	m 0. 40. 0 B.
D	Secunda alæ australis	3	0. 5. 40.	Q 23. 56 B.

Libra

A	Lanx australis	2	11. 19. 51	m 26. 38 B
C	Lancem australem præced. borealis	5	10. 23. 33	m 2. 6. 9. B
D	Lancem australem sequens	5	14. 57. 37	m 2. 17. 4. B
E	In jugo præcedens	5	11. 29. 11	m 8. 17. 43 B
L	Sub lancibus præced. vel in chela m.	3	17. 0. 51	m 7. 44. 38 A
R	Sub jugo lancis occident. neb. med.	7	10. 58. 17	m 9. 52. 36 B
V	Quæ lanci austr. adhæret a parte			
	Superiori seq. non nisi tubo visibilis	7	11. 33. 42	m 6. 49. 30 B

Scorpius

G	In chela australi	3	16. 55. 41	m 7. 34. 44 A

Hydra

A	Cor	1	23. 32. 44	Q 22. 23. 6 A
L	In nexu colli prima	5	12. 44. 6	Q 16. 6. 31 A
M	In nexu colli media	5	12. 0. 30	Q 16. 58. 23 A
N	In nexu colli tertia	4	13. 56. 56	Q 19. 15. 31 A
O	A corde prima	4	18. 58. 51	Q 26. 36. 31 A
P	A corde secunda	5	1. 37. 13.	m 26. 3. 43 A
Q	A corde tertia	5	4. 36. 6	m 23. 30. 35 A
R	A corde quarta	4	5. 50. 31	m 21. 58. 57. A
S	Prima trium ante craterem	4	11. 39. 30	m 4. 38. 29 A
T	media	5	13. 20. 8	m 2. 43. 5. A
V	Tertia et proxima	4	16. 38. 31	m 0. 57. 17 A
W	Sub cratere borealis	4	24. 56. 30	m 43. 56. 34 A
X	Sub cratere australis	5	25. 50. 21	m 30. 31. 56 A
Y	Præcedens in Triquetro	3	4. 58. 0	♎ 33. 31. 0. A
Z	Media	4	7. 08. 0	♎ 33. 20. 0 A
a	Sequens Triquetri	4	4. 46. 0	♎ 33. 22. 0 A
b	Prima caudæ sub corvo	6	21. 8. 37	♎ 18. 49. 0 A
c	Penultima et lucida caudæ	3	13. 17. 30	♎ 13. 39. 54 A
d	Extrema caudæ	3	4. 51. 21	m 0. 56. 56 A
e	Sub corde duarum australis	6	22. 8. 23	Q 43. 48. 46 A
f	Sub corde duarum australis	6	22. 28. 48	Q 46. 8. 31 A
g	Tertia caudæ	4	6. 55. 33	♎ 22. 16. 44 A
k	Post flexum I. secunda	6	20. 49. 31	Q 43. 42. 33 A
l	Informis supra med. ante crat. seq.	6	12. 58. 21	m 20. 28. 56 A

Sextans Uraniæ

A	In latere australis superior	6	28. 31. 38	Q 19. 43. 36 A
B	In limbo precedens	6	1. 8. 46.	m 18. 19. 55 A
C	In limbo sequens	6	3. 28. 11.	m 17. 31. 0. A
D	Sextantem sequens ante craterem	7	13. 56. 58	m 13. 9. 22 A
E	In latere australis superior	5	21. 41. 6.	Q 28. 44. 44 A
F	Ad cylindrum Sextantis	5	20. 35. 6	Q 26. 57. 24 A
G	In medio Sextantis	4	0. 21. 21	m 11. 6. 52 A
H	In regula ad pinnacidium	5	6. 10. 21	m 11. 38. 48 A
I	Inter regulam et latus Sext. bor.	5	5. 45. 6	m 9. 13. 50 A
K	Inter Sextantem et Leon. inferior.	6	5. 45. 1	m 3. 57. 7 A
L	Inter Sextant. et Leonem superior.	6	1. 58. 31	m 1. 30. 44 A
M	Ad latus superius Sextantis	5	29. 56. 21	Q 5. 58. 23 A

Crater

A	In basi	4	19. 55. 11	m 22. 50. 56 A
B	In medio ventre superior	4	22. 56. 36	m 11. 38. 36 A
C	In medio ventre inferior	4	23. 28. 41	m 9. 39. 46 A
D	Ansæ superioris præcedens	4	22. 28. 57	m 13. 46. 55 A
E	Ansæ superioris sequens	4	24. 55. 21	m 11. 17. 31 A
F	Ansæ inferioris præcedens	4	0. 28. 21	♎ 28. 13. 47 A
G	Ansæ inferioris sequens	4	2. 22. 21	♎ 16. 2. 15. A
H	Media inter ansas	5	26. 45. 21	m 15. 12. 23 A
I	Parvula ad inferiorem ventris	6	25. 50. 31	m 20. 44. 20 A
K	Extrema ansæ inferioris	6	2. 32. 51	♎ 17. 50. 15 A

Corvus

A	Alæ præcedens	3	7. 3. 1.	♎ 15. 25. 8 A
B	Alæ sequens	3	9. 42. 36	♎ 14. 6. 35 A
C	In pectore	3	13. 36. 11	♎ 17. 58. 35 A
D	In capite	4	7. 24. 36	♎ 9. 31. 51 A
E	In rostra	4	3. 31. 36	♎ 21. 40. 5 A
F	In collo	3	10. 3. 21	♎ 18. 11. 51 A
G	Parva supra alam sequens	5	10. 4. 33	♎ 11. 34. 17. A
H	Informis supra alam sinistram	6	10. 55. 21	♎ 7. 51. 40 A

Argo Navis

y	Informis inter navem et centaur. bor. Hevelio, supr. navem, robur præcedens informis	4	23. 35. 0	m 48. 36. 0 A

Centaurus

A	Australis capitis	5	4. 16. 0	m 21. 39. 0 A
B	Borea capitis	5	4. 21. 0.	m 18. 52. 0. A
C	Præcedens capitis	5	2. 57. 0.	m 20. 29. 0 A
D	Media capitis	5	4. 32. 0.	m 19. 58. 0 A
E	Humerus præcedens	3	29. 29. 0	♎ 25. 50. 0 A
F	Humerus sequens	3	8. 35. 0.	m 15. 4. 0 A
G	In armo dextro	4	2. 46. 0.	m 27. 32. 0. A
H	In Zuto præced. hor. s. in brachio Sinistro prima	4	11. 59. 0	m 22. 24. 0 A
I	Australis s. in brachio sinistro sequens	4	13. 5. 0.	m 18. 44. 0 A
K	Sequentium duarum borea	4	15. 38. 0	m 16. 16. 0 A
L	Sequentium australis	4	16. 32. 0	m 20. 54. 0. A
M	In latere sinistro trium præced	4	7. 42. 0	m 18. 30. 0 A
N	Media	4	7. 58. 0	m 18. 33. 0 A
O	Sequens	4	9. 31. 0	m 17. 55. 0. A
P	In brachio sinist. s. sub brachio sinist.	5	10. 22. 0	m 16. 31. 0 A

GLOBI COELESTIS IN TABUL[AS] PLANAS REDACTI PARS V.

in qua Longitudines Stellarum fixarum ad ānum Christi comp[utum] 1730 tam Arithmetice quam Geometrice exhibentur

à IOH. GABR. DOPPELMAYR MATH. P.P. Academ. Cæs. Leop[old]. Car. Nat. Curiosorum, nec non Societatis Regiæ Borussicæ Socio

Operâ IOH. BAPT. HOMANNI C[æs]. MAJ. GEOGR. Norimbergæ.

Cum Privilegio Cæs. Majestatis.

BOOTES CUM MONTE MÆNAL.

		Mag.	Longit.	Latitud.
E	Humerus sinister	3	29.39.33.	♌ 49.54. B
F	In extremitate clavæ sequent.	4	4.23.29.	♍ 9.0.30. B
a	In media clava præced. auster.	5	1.25.3.	♍ 5.6.38. B
b	In media clava sequens borealis	3	3.15.26.	♍ 6.31.32. B
c	In media clavæ media	6	4.24.29.	♍ 3.15.54. B
d	Parvula ad finist. hum. in clava	5	1.24.3.	♍ 9.30.57. B
e	Sub finistro pede tertia	5	1.13.38.	♍ 19.29.39. B
f	Sub finistro pede quarta et ultima	6	11.25.54.	♍ 20.11.36. B

CORONA BOREALIS.

		Mag.	Longit.	Latitud.
A	Lucida coronæ	2	8.28.33.	♍ 43.40 B
B	In superiori limbo prima	4	14.39.41.	♍ 46.2.8. B
C	In superiori limbo secunda	4	4.36.34.	♍ 48.36.43 B
D	In superiori limbo terna	5	8.17.36.	♍ 50.29.34 B
E	In superiori limbo quarta	5	15.11.29.	♍ 49.34.32 B
F	In inferiori limbo prima	5	13.1.41.	♍ 45.13.30 B
G	In inferiori limbo secunda	5	13.38.21.	♍ 44.44.50 B
H	In inferiori limbo tert. et ultima	5	15.17.27.	♍ 46.8.42 B

HERCULES.

		Mag.	Longit.	Latitud.
A	Caput	3	12.23.39.	♈ 17.28.9. B
B	Humerus sinister	3	27.17.55.	♒ 52.45.30. B
C	Humerus dexter	3	10.28.13.	♑ 45.13.32. B
D	In tergo	4	27.47.28.	♒ 33.30.14. B
E	Penultima sinistri brachii	3	25.28.27.	♒ 50.4.30. B
F	In latere dextro	3	6.36.1.	♑ 33.19.38 B
G	In dextro femore præcedenti	3	18.15.13.	♑ 18.39.53. B
H	Ad genicem in clune dext.	3	25.0.37.	♑ 60.22.23 B
I	In dextro genu	3	25.42.17.	♑ 60.55.0. B
K	In sinistro cub. f. med. sin. brachii	4	17.28.14.	♑ 17.29.28 B
L	Ultima sinistri brachii	4	27.46.44.	♒ 13.36.11. B
M	In dextro brachio	4	16.9.8.	♑ 45.18.12. B
N	In exuvio Leonis præcedens	4	21.28.32.	♑ 1.34.30. B
O	In exuvii Leonis medius auster.	4	25.24.49.	♑ 8.47.52. B
P	In exuvio Leonis medius infer.	4	25.42.46.	♑ 13.44.42. B
Q	In exuvio ultima	4	28.58.43.	♑ 32.17.55. B
R	In dextro femore media	4	9.8.30.	♑ 60.24.43. B
S	In dextro femore ultima	4	17.36.23.	♑ 60.43.12. B
T	In dextro tibia nebulosa	4	23.17.50.	♑ 53.28.30. B
k	In clava Herculis	5	0.28.6.	♑ 3.5.27. B
l	In exuv. Leonis omnis super. ad ver.	5	30.22.3.	♑ 50.38.50. B
m	In manu dextra	5	11.46.40.	♑ 12.2.53. B
n	Parvula ad dextrum humerū	5	12.59.57.	♑ 27.36.0. B
o	Inter humeros	5	3.18.37.	♑ 60.49.50. B
p	In pectore triū nebul. inf. major	5	0.49.41.	♑ 35.33.37. B
q	In collo	6	15.48.31.	♑ 60.43.12. B
r	In sinistro latere	5	22.3.28.	♑ 50.53.2. B
s	In exuvio Leonis supra coronam præced.	5	13.17.6.	♑ 24.33.25 B
t	In exuvio supra coron. sequens	5	17.35.49.	♑ 23.54.32. B
u	In sinistro coxa	5	20.19.8.	♑ 54.36.30 B
w	Ad podicē in clunc sinistro	5	23.26.53.	♑ 58.29.27. B

CERBERUS.

		Mag.	Longit.	Latitud.
A	In priori capite	5	26.43.29.	♑ 5.8.36. B
B	In medio capite inferior	5	28.39.52.	♑ 20.29.28 B
C	In medio capite superiori	5	4.1.7.	♑ 5.0.0. B
D	In tertio s. ultimo capite	5	29.5.55.	♑ 44.20.4 B

LYRA.

		Mag.	Longit.	Latitud.
A	Lucida Lyræ	1	13.39.38.	♑ 61.47.37. B
B	In jugo præcedens	4	15.0.37.	♑ 6.4.50 B
C	In jugo sequens	3	18.30.27.	♑ 7.30. B
D	Lucida in sequenti boreali	3	14.46.50.	♑ 28.28.13 B
E	Lucida sequens australis prima	5	16.30.54.	♑ 60.24.37.2
F	Lucida sequens auster. secunda	5	17.49.46.	♑ 44.33.33 B
G	Lucida sequens aubralis tertia	6	22.41.59.	♑ 58.6.43 B
H	In ala sequente Vult. borealis	6	20.17.59.	♑ 60.43.50 B
I	In ala sequenti Vult. australis	5	26.42.50.	♑ 33.38.37.2
K	Sub præcedenti in jugo	6	14.50.27.	♑ 53.39.3. B
L	Sub sequenti in jugo	6	18.17.43.	♑ 54.57.30 B
M	Ad collum Vult. inferum	5	21.23.31.	♑ 60.38.25. B
N	In ancone ale sinistræ	6	6.25.24.	♑ 62.49.0. B
O	In cubito ale dextræ superior	6	29.29.47.	♑ 57.29.17. B
P	In cubito ale dextræ inferior	6	0.30.8.	♑ 59.17.43 B
Q	In ala sinistra	5	5.4.44.	♑ 59.28.11. B

CYGNUS.

		Mag.	Longit.	Latitud.
A	Rostrum	3	27.33.27.	♑ 49.4.52 B
B	Nova pectoris	3	18.4.59.	♑ 59.33.20 B
C	Pectus	3	23.9.36.	♑ 57.32.53. B
D	In ancone ale australe	3	24.0.41.	♑ 49.20.52 B
E	In capite	3	1.19.31.	♑ 50.43.32 B
F	In medio colli	4	0.36.38.	♑ 54.22.20 B
G	In princ. ale auster. prox. supra am.	4	26.8.31.	♑ 33.42.30. B
H	Informis sub ala auster. boreal.	4	0.50.59.	♑ 42.39.27. B
I	Informis sub ala auster. præced. auste.	4	17.1.47.	♑ 57.30.34 B
K	Informis sub ala auster. seq. auste.	4	22.0.36.	♑ 56.33.60 B
L	Informis sub ala auster. seq. boreal.	4	22.40.0.	♑ 57.49.30 B
M	Ad genicē	4	22.40.0.	♑ 57.49.30 B
N	Inter lucidiorem colli	3	11.38.59.	♑ 57.36.1. B
O	Supra lucidiorē colli trū præced	3	11.38.59.	♑ 57.36.1. B
P	Supra lucidiorē colli trū media	3	11.38.33.	♑ 55.55.33. B
Q	Supra lucidiorē colli trū sequens	3	13.6.13.	♑ 54.50.43. B
R	Sub nova prima	5	13.39.29.	♑ 55.8.0. B
S	Sub nova secunda	5	16.13.47.	♑ 54.39.1. B
T	Informis in via lactea præced colli	5	6.35.45.	♑ 37.54.23 B

SERPENS.

		Mag.	Longit.	Latitud.
A	Lucida in medio collo	2	28.38.59.	♌ 56.40 B
B	In extremitate rostri	5	28.46.5.	♌ 14.0.0. B
C	In inferiori mandibula	5	13.22.6.	♌ 38.30.20 B
D	In ore	5	15.53.7.	♌ 50.2.35. B
E	Sub oculo ad maxillam	5	15.57.53.	♌ 37.9.55. B
F	In temporibus	3	28.44.40.	♌ 13.21.39 B
G	In oductione colli prima ad genā	3	16.9.45.	♌ 34.23.43 B
H	In oductione colli tertia	3	14.33.9.	♌ 58.59.32 B
I	Prope incidam colli	3	28.14.13.	♍ 3.21.39. B
K	Prope collū	3	20.29.36.	♍ 23.3.4. B
L	In secunde flexu	4	22.9.31.	♍ 16.20.9. B
M	Ante ultimā nexum primæ	4	20.44.45.	♍ 8.4.25. B
N	Ante ultimū nexum secunda	5	21.35.24.	♍ 30.38.3. B
O	Prima caudæ	5	26.22.39.	♍ 30.50.32 B
P	Penultima caudæ	3	1.37.18.	♍ 60.39.37 B
Q	Ultima clunis caudæ	3	3.1.40.	♍ 26.57.40 B
R	Sub colle in I. flexu sequens	6	20.38.21.	♍ 30.20.23 B
S	Sub colle in I. flexu præcedens	6	19.36.41.	♍ 31.31.28. B
T	In I. flexu Serp. ab hinc forg. proxi.	5	19.38.51.	♍ 26.32.45. B
V	In oductione colli secunda	6	10.38.2.	♍ 12.20.24. B

SERPENTARIUS.

		Mag.	Longit.	Latitud.
A	Caput	2	18.38.43.	♌ 15.37.3. B
B	Humeri sinistri superior	5	21.34.36.	♌ 28.0.44. B
C	Humeri sinistri inferior	4	12.34.55.	♌ 20.30.59. B
D	Humeri dextri inferior	3	8.2.42.	♌ 31.55.33. B
E	In manu dextra sequali	3	28.11.2.	♍ 7.7.39. B
F	In manu dextra australis	3	29.44.38.	♍ 16.31.5. B
G	In dextro genu	3	5.26.44.	♍ 1.28.7. B
H	In sinistro femore	3	18.30.58.	♍ 7.17.27. B
I	Superior in humero dextro	5	2.51.34.	♍ 12.14.34 B
K	In dextro brachio proxcd. trui inf.	6	0.29.7.	♍ 23.38.30. B
L	In dextro poplite	5	2.40.32.	♍ 13.18.48. B
M	In sinistro manu australis	5	25.57.18.	♍ 21.56.13. B
N	In sinistra manu boreali	5	27.0.21.	♍ 19.23.47. B
O	In dextro cruce borealis	4	4.52.48.	♍ 5.18.38. B
P	In dextro cruce australis	4	6.24.53.	♍ 1.20.9.53 B
Q	In dextro pede	4	13.34.57.	♍ 3.37.37. B
R	In dextro calcaneo	4	9.31.7.	♍ 0.34.35. B
S	Stella inter. in Serpentario 1604.	4	18.30.26.	♍ 1.36.0. B
T	In sinistra fura, clarissima s. prima	4	17.37.24.	♍ 7.43.46. A
V	In sinistra fura secunda. Tychō in tertia	4	18.30.47.	♍ 0.49.14. A
W	Informis juxta sinistrū humerū sup.	5	26.19.36.	♍ 37.9.22. B
X	Secunda vel media præcedens	5	26.54.17.	♍ 36.27.20 B
Y	Terna vel prima et inferior	5	26.41.18.	♍ 34.31.33. B
Z	Quæ secundā vel inedia sequitur	4	27.44.26.	♍ 26.7.22 B
a	Duarū supremarum bor. seq.	4	28.25.23.	♍ 33.3.26. B
b	Duarum supremarū australi	4	28.32.34.	♍ 30.14.6 B
c	In gallo inferior australis	4	26.30.27.	♍ 20.22.9 B
d	In gallo superior borealis	4	20.33.34.	♍ 15.20.52 B
e	In sinistro latere vel in lumbo finist.	5	17.27.30.	♍ 28.24.1. B
f	In clune dextro trui inferior	5	18.37.36.	♍ 31.30.16 B
g	In dextro brachio prxc trui med	5	4.3.3.	♍ 26.13.22. B
h	In dextro latere	5	7.57.47.	♍ 23.48.6 B
i	In dextro brachio segq superior	5	6.11.54.	♍ 29.34.4. B
k	In dextro brachio præced trui seq.	6	4.43.36.	♍ 30.44.29 B
l	In gena præcedens	6	12.8.56.	♍ 33.36.31.B
m	In gena sequens	6	13.57.43.	♍ 33.57.46. B
n	In cervice	6	18.46.21.	♍ 32.59.31. B
o	In tergo superiore	5	15.57.6.	♍ 27.24.44 B
p	In tergo inferiore	5	19.23.7.	♍ 22.38.11 B
q	In clune dextro superior	5	30.39.49.	♍ 18.32.11 B
r	In clune dextro media	6	0.43.36.	♍ 26.14.20 B
s	In dextro brach segq inferior	6	0.33.30.	♍ 27.31.46. B

SCUTUM SOBIESCIANUM.

		Mag.	Longit.	Latitud.
A	In limbo scuti orientali	5	11.8.5.	♑ 56.57.46. B
B	In cruce scuti occidentali	4	5.18.35.	♑ 15.1.29. B
C	In cruce scuti oriental. superior	5	7.15.3.	♑ 19.6.33. B
D	In cruce scuti orient. inferior	5	7.2.55.	♑ 9.2.45. B
E	In limbo scuti occid. infer. australi	5	0.28.53.	♑ 5.44.0. B
F	In limbo scuti occident. superior	5	1.22.49.	♑ 14.54.33. B
G	In super. limbo ad cusp. alæ Aquilæ	4	18.38.52.	♑ 18.37.49. B

ANTINOUS.

		Mag.	Longit.	Latitud.
A	Dextrū brachiū Tych. man. dext	3	1.30.36.	♒ 18.49.6. B
B	Sinistrum brachium	3	19.32.30.	♒ 24.54.28.B
C	In sinistro pede sequens	3	13.33.3.	♒ 17.39.47. B
D	In pectore	4	24.61.40.	♒ 37.37.27 B
E	In sinistro latere superior	4	22.5.55.	♒ 20.6.54 B
F	Supra genu sinistrum	4	21.4.27.	♒ 14.17.13. B
G	In pede sinistro præcedens	4	12.38.38.	♒ 16.56.57.B
H	Sub brachio sinistro	5	19.49.5.	♒ 32.5.53 B
I	In sinistra fura	6	17.30.53.	♒ 16.33.37.B
K	In dextro femore	5	25.39.39.	♒ 24.47.59 B
L	In dextro cruce	6	20.28.47.	♒ 18.38.18. B
M	In dextro genu	5	23.13.14.	♒ 20.30.13 B
N	In sinistro latere inferior	6	20.34.43.	♒ 18.48.16 B
O	In arcu inferior s. prima	5	9.19.27.	♒ 15.43.51 B
P	In arcu secunda	5	17.12.32.	♒ 25.38.44 B
Q	In arcu tertia	4	7.50.9.	♒ 16.52.26 B
R	In arcu ultima et superior	4	8.43.53.	♒ 28.20.44 B
S	In sagitta præcedens	4	3.14.36.	♒ 22.47.44. B
T	In sagitta sequens	5	10.5.36.	♒ 20.44.37. B

AQUILA.

		Mag.	Longit.	Latitud.
A	Lucida in Scapulis	1	27.58.20.	♑ 29.43.31 B
B	In humero dextra	3	27.12.31.	♑ 33.20.40 B
C	In collo s. pectore	4	28.40.57.	♑ 26.47.53 B
D	In capite	6	1.20.0.	♒ 27.7.36. B
E	Parva supra lucidam	4	28.27.51.	♑ 30.55.5. B
F	Parva supra humerū sequens	6	28.36.27.	♑ 32.26.9. B
G	In ala auster. super. præcedens	4	23.2.50.	♑ 28.55.44 B
H	In ala auster. infer. sequens	5	23.3.39.	♑ 26.36.44 B
I	Caudæ proxime præced. super.	4	19.30.6.	♑ 37.40.53. B
K	Supra caudæ informis inferior	4	21.5.52.	♑ 35.6.27 B
L	Supra caudæ informis med.	4	21.1.22.	♑ 33.31.0. B
M	In cauda	3	26.2.39.	♑ 36.17.21 B

SAGITTA.

		Mag.	Longit.	Latitud.
A	Extrema versus orientē vel in cuspide dextri pedis vulpeculæ	4	3.37. 0.	♒ 39.36.22 B
B	Mediarum inferior	4	29.39. 0.	♑ 3. 0. B
C	Mediarum superior	6	0.36.54.	♒ 39.49.54 B
D	Duarum ad occid. occidens. australis	4	27.40.52.	♒ 38.53.56 B
E	Duarum ad occid. borealis	4	27.37.37.	♒ 38.53.48. B

VULPECULA CUM ANSERE

		Mag.	Longit.	Latitud.
A	In naso inferi. ante rostri cusp. inf	6	28.53.27.	♑ 56.58. 9. B
B	Ad genā vel in cap. ad oculum	6	0.54.33.	♒ 6.34.36. B
C	In aure dextra vel nova sub cap. cygni non adfix.	2	2.42.52.	♒ 47.28. 3. B
D	Supra tergū inform. ad vias lact.	5	7.7.31.	♒ 47.6. 2. B
E	In collo sequens	5	6.30. 34.	♒ 44.35.56 B
F	In collo præcedens	5	3.28. 6.	♒ 44.1.32 B
G	In pede superiori sinist.	6	23.8.52.	♒ 42.43.32 B
H	Ad arm. dext. ped. inter. seq. et inf.	6	9.41.58.	♒ 42.4.46. B
I	In latere præcedens	6	20.33.36.	♒ 23.4.36. B
K	In latere sequens	6	18. 7.33.	♒ 42.29.40 B
L	In tergo	5	30.30.54.	♒ 44.4.25. B
M	In occxidice superior ad ventrem	6	17.16. 3.	♒ 45.17.56 B
N	Supra tergum sequens informis	5	11.51.27.	♒ 46.0. 0. B
O	In femoris	6	28.51.53.	♒ 53.10.48. B
P	In coxendice inferior	6	16.35.57.	♒ 60.37.25 B
Q	In dextro pede posteriori	5	15.27.55.	♒ 38.33.25 B
R	In sinistro pede posteriori	5	27.27.39.	♒ 37.44.2. B
S	Ad eductionē caudæ australis	6	27.51.8.	♒ 40.25.40 B
T	Prima caudæ s. ad educt. caud. bor.	5	22.34.39.	♒ 43.17.58 B
W	Ad arm. dext. pedis anter. prm. et super.	5	7.31.50.	♒ 24.44.2 B
X	In capite anseris	6	28.28.57.	♒ 47.46.35 B
Y	In ala sinistra anseris	5	20.56.43.	♒ 31.37.20 B
Z	Sub ala sinistra anseris nebulosa	6	23.33.54.	♒ 31.33.0. B
a	Olim in ala dext. anseris nunc ve ro pes sinister vulpec. anterior	5	26.29.27.	♒ 50.34.0. B
b	Ad pedē anteriorem dext. vulpec.	6	3.17.47.	♒ 39.20.59 B
c	In Ancone ale sin. anseris olim sub. caput anseris	6	22.48.30.	♒ 44.49.26 B

DELPHINUS.

		Mag.	Longit.	Latitud.
A	In capite	3	15.39.41.	♒ 24.48.17. B
B	Apex rhombi occident	3	21.36.39.	♒ 2.1.17. B
C	Mediarū in rhombo borealis	3	13.37.37.	♒ 13.7.17. B
D	Earundem australis	3	13.26.39.	♒ 11. 2.36. B
E	In cauda	3	14.20.41.	♒ 29.9.20. B
F	Ante apicem rhombi occident	5	12. 2. 6.	♒ 22.35.31. B
G	Sub eodem apice præcedens	6	13. 6. 9.	♒ 20.46.54 B
H	Sub eodem apice sequens	6	14.39.23.	♒ 20.39.35. B
I	Sequens caudæ	5	17.40.38.	♒ 28.58.20. B
K	In eductione caudæ superior	6	17.36. 0.	♒ 27.34.23. B
L	Ad mandibulam superior	6	14.46.44.	♒ 29.40. 3. B
M	Delphinum sequens media	6	16.27.33.	♒ 28.26.46. B
N	Delphinum sequens infima	6	16.31.17.	♒ 28.50.56 B
O	Media caudæ inferior	5	14.31.27.	♒ 23. 2.40 B

EQUULEUS.

		Mag.	Longit.	Latitud.
C	In ore præcedens	5	19.44.44.	♒ 25.37.30 B
F	Ante caput informis	5	14.53.40.	♒ 20.38.35 B

LIBRA.

		Mag.	Longit.	Latitud.
B	Centrum libræ	2	15.36.49.	♏ 8.34.47 B
E	In jugo sequens	4	17.37. 5.	♏ 7. 9.34. B
F	In medio lancis orientalis	6	21.36.28.	♏ 9.20.23 B
G	Ad superiorē limbum præced.	6	18.31.37.	♏ 2.58.49 B
H	In superiori limbo media	6	21.20.44.	♏ 6.28.53. B
I	In superiori limbo ultima	6	23.22.49.	♏ 6. 2.29. B
K	Post lancē prima Tych. secunda	4	26. 3.36.	♏ 7.32.21 B
M	Post lancē secunda Tych. tertia	4	27.20.15.	♏ 8.10.45 B
N	Post lancē tertia Tych. super. f. ata.	4	27.32.36.	♏ 9.38. 3. B
O	Supra jugū duarum australis	5	29.33.49.	♏ 8.59.11 B
P	Supra jugū duarum borealis	5	29.45.38.	♏ 7.57.51 B
Q	In lance orient. ad Eclipt. infer.	6	2.22.33.	♏ 0.51.41. A
T	Sub lance orient. sub Eclipt. super	6	21.56. 6.	♏ 0.25.30. A

SCORPIUS.

		Mag.	Longit.	Latitud.
A	Cor	1	5.58.9.	♐ 4.27.39. A
B	Suprema frontis	2	29.46.46.	♏ 1. 6.43 B
C	Media frontis	3	28.47.34.	♏ 1.53.33. A
D	Infima frontis	4	29.20.20.	♏ 0.23.36. A
E	Præcordium	4	1.59. 9.	♐ 3.55. 6. A
F	Venter vel in tergo	4	7.39.29.	♐ 6. 0. 4. A
H	In chela borea	5	29. 6.34.	♏ 10.56.18. B
I	Ad rostrum	4	26.51. 3.	♏ 0.30.34 B
K	Prope suprem. frontis bor.	4	0.50.37.	♐ 0.34.33 B
L	Prope suprem. front. austr. duaru. contiguarum super. major	5	29.57.33.	♏ 0. 22.46 B
M	In australi pede medio	4	29.38.57.	♏ 0.39.32 B
N	In australi latere	5	2.30. 7.	♐ 6.24.31. A
O	Supra precordium	6	4.38.29.	♐ 1.38.53. A
P	In cubitale quarti pedis australis	4	27.11.31.	♏ 0.24.33. A
Q	In secundo pede australis	4	28.50.17.	♏ 0.28.48. A
R	In terno pede, s. medio australis	4	28.33.22.	♏ 0.54.27. A
S	In medio pede borealis	6	7.27.32.	♐ 2.32.38 B
T	Quæ supra cor.	3	5.58.38.	♐ 3. 7.23. A
V	Duarū cor præc. ad austr. seq.	6	4.8. 0.	♐ 6.52. 0. A
W	Hall. magnit.	6	4.33. 0.	♐ 6.30. 0. A
X	Præcedens	5	3.50. 0.	♐ 4.30. 0. A
Y	Quæ supra præced. in Cor Scorpii	6	3.30. 0.	♐ 11.38. 0. A
Z	In primo spondylo caudæ	3	11.30. 0.	♐ 7.15. 0. A
a	In secundo spondylo	3	12.15. 0.	♐ 5.20. 0. A
b	Nebula tertu spondyli	4	13.20. 0.	♐ 3.33. 0. A
c	Hinc nebulæ contiguæ	4	13.20. 0.	♐ 3.33. 0. A
d	Quæ in quarto spondylo	4	16.52. 0.	♐ 2.40. 0. A
e	In quinto spondylo	4	21.43. 0.	♐ 2.39. 0. A
f	In sexto spondylo	4	26.34. 0.	♐ 2.38. 0. A
g	In septimo spondylo	4	29.36. 0.	♐ 3.34. 0. A
i	In aculeo caudæ	4	2.20.44. 0.	♑ 3.40. 0. A
k	Aculeum præcedens	3	2.20.37. 0.	♑ 3.33. 0. A
l	Informis sequens caudam	4	2.41.30. 0.	♑ 2.38. 0. A
m	Nebul. inter cauda q? et arcum s.	4	29.57. 0.	♑ 1.29. 0. A
f	Prope supra front. duarū austral. inf.		29.58.33.	0.35.40 B

SAGITTARIUS.

		Mag.	Longit.	Latitud.
A	In capite prima vel sub oculo	4	9.42.43.	♑ 1.47.28 B
B	In capite media vel ad genam	4	11.32.38.	♑ 0.38.46 B
C	In capite ultima vel ad cornu cervi	4	12.31.35.	♑ 33.40. B
D	Dexter humerus	4	8.38.30.	♑ 3.38.43. A
E	Dextra manus	3	3.46.52.	♑ 6.37.31. A
F	In borrali arcu superior	4	28.28.38.	♑ 0.28.31. B
G	In borrali arcu inferior	4	2.37.30.	♑ 1.59.35. A
H	In principio Sagittæ	5	6.30.32.	♑ 3.50.33. A
I	In dextro latere	3	19.50.55.	♑ 6.28. 3. A
K	Sub dextra axilla	4	21.15.57.	♑ 4.56.20. A
L	In dorso	5	14.20.32.	♑ 13.38.38. A
M	In sinistro cubito	6	18.33.17.	♑ 8.27.4. A
N	In præcedente fascia borealis	5	15.40.48.	♑ 16.31.34. B
O	In præcedente fascia media	6	15.42.58.	♑ 16.20.39. B
P	In præcedente fascia australis	6	14.33.32.	♑ 13.27.7. B
Q	In sequente fascia præcedens	6	20.25.45.	♑ 19.56.36. B
R	In sequente fascia sequens	6	24.21.28.	♑ 15.36.20 B
S	In sequente fascia infima	6	21.32.58.	♑ 13.33.23.B
T	In eductione caudæ sequens	5	23.0.38.	♑ 22.27.25.A
V	In eductione caudæ ad. austr.	5	21.42.34.	♑ 17.42.5. A
W	In sinistro humero	6	13.46.7.	♑ 4.38.26.A
X	Ad mentum	6	9.51.3.	♑ 10.31.26 B
Y	Quæ in cuspide Sagittæ	4	27.11.40.	♑ 0.30.48 B
a	In ala inferi. parte, alvus.	3	1.38.0.	♑ 10.43.0.A
b	In priore sinistra suffragine	3	29.56.0.	♑ 13.36.0.A
c	Inter Scapitā vel supra Scapū	3	29.46.0.	♑ 14.23.0.A
d	De quatuor Embelli præc. et bor.	5	22.5.0.	♑ 15.23.0.A
f	Sequens, et borea	5	23.1.0.	♑ 15.24.0.A
g	In genu dextro priore	4	12.45.0.	♑ 18.20.0.A

CAPRICORNUS.

		Mag.	Longit.	Latitud.
A	In cornu boreali trium media	3	0. 6. 3.	♒ 7.3.3. B
B	In cornu australi	3	0.17.32.	♑ 4.43.37. B
E	Nebulosa in fronte	3	29. 3.11.	♑ 0.38.11. B
F	Nebulosa ad oculum præcedens	3	28.51.11.	♑ 2.31.8. B
G	Nebulosa sequens	3	28.38.	♒ 0.30.52 B
H	Supra nebulosas ad oculum	6	29.0.51.	♑ 1.38.52. B
I	In cervice sub auct.	6	1.55.23.	♑ 3.28.36. B
K	In cervice, australis	6	4.9.14.	♑ 0.20.35. B
L	Genu sinistrum	5	3.24.49.	♑ 6.54.33. B
M	Genu dextrum	5	0.39.6.	♑ 8.35.30. B
N	In dextro armo	5	8.8.27.	♒ 7.57.32. B
O	In dorso præcedens	5	30.5.38.	♑ 0.37.54. B
Q	In dorso sequens	5	1.59.44.	♑ 0.52.12. B
R	In pectore australis	6	9.31.43.	♑ 4.27. 0. A
b	Trui conjuga in corn. bor. orient.	6	0.34.38.	♒ 5.44. 3. B
c	Ad cornu boreale præcedens	6	28.51.52.	♑ 7.44. 3. B
d	In cornu boreali australiore	4	0. 0.29.	♒ 7.37.32. B

AQUARIUS.

		Mag.	Longit.	Latitud.
C	In fascia manus dextræ præcedēs	4	8. 2.6.	♒ 8.23. B
D	In fascia manus dextræ sequens	5	9.20.33.	♒ 8.39.38. B
E	Manus dextra	3	9.37.53.	♒ 4.52.45. B

LUPUS.

		Mag.	Longit.	Latitud.
Q	Contiguarū ante collum præced? in pede sinistro priori.	5	23.45.0.	♏ 17.3. 0. A
R	Sequens	5	24.30.0.	♏ 17.38. 0. A
T	Ad jugulū duarū? auster. s. in collo	5	5.48.0.	♐ 17.21. 0. A
V	Borea	5	2.49.0.	♐ 19.30. 0. A
W	In vicin duarum præceden	6	26.54.0.	♏ 17.14. 0. A
X	Hinc contigua sequens	6	28.45.0.	♏ 17.47. 0. A
Y	In vicin seq. s. in capite præced	5	29. 1.0.	♏ 17. 0. 0. A
Z	Hinc etiam contig. in cap. seq	6	0. 3.0.	♐ 18. 0. 0. A

CORONA AUSTRALIS.

		Mag.	Longit.	Latitud.
B	Quæ foris præced. ad austrum	6	2.32.0.	♐ 20.33.0. A
	Sequitur in corona	6	28.28.0.	♐ 19.35.0. A
C	Hanc sequens	6	0.42.0.	♐ 17.49.0. A
D	Quæ hanc etiam sequitur	6	2.32.0.	♐ 16.42.0. A
E	Ante genu sagittarii trui? austr.	5	25.32.0.	♐ 15.54.0. A
F	Media	5	30.15.0.	♐ 15.14.0. A
G	Borea, prima	5	2.44.0.	♑ 14.39.0. A
H	In capite bor. dext. coniuq. sequens	6	8.11.0.	♑ 15.31.0. A
I	Procedens	6	7.43.0.	♑ 14.23.0. A
K	Borealissima corona	6	1.39.0.	♑ 13.27.0. A
L	Australior et præcedens	6	2.32.0.	♑ 13.47.0. A
M	Hæc etiam australior	6	24.0.0.	♑ 13.38.0. A

PISCIS NOTIUS.

		Mag.	Longit.	Latitud.
Q	Relig. ad Sept. a Austr. mm. in cauda	4	6.30.0.	37.20.0
R	Quæ magis in Boream mm. in cauda	5	0.30.0.	35.10.0

GLOBI COELESTIS IN TABULAS PLANAS REDACTI PARS VI.

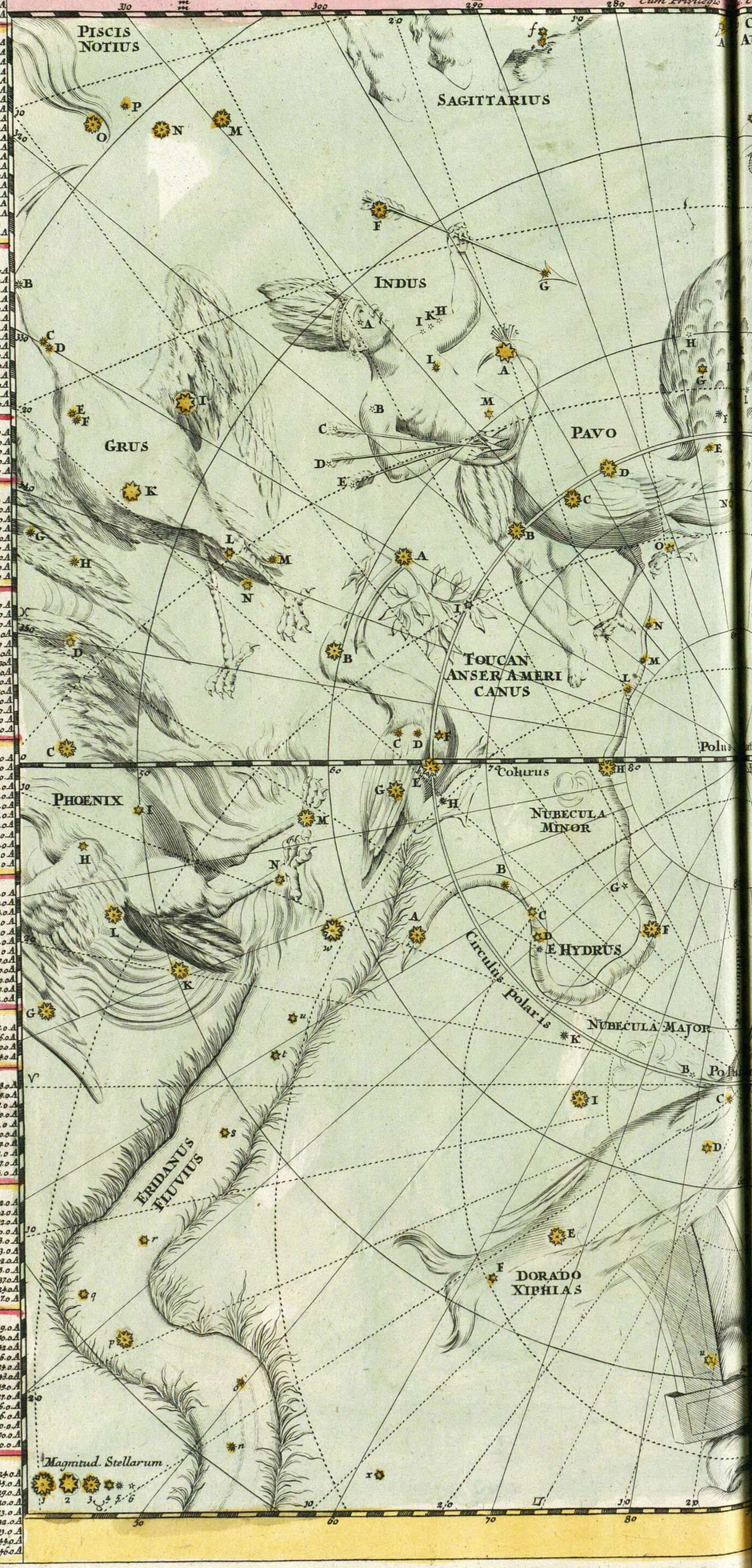
in qua Longitudines Stellarum fixarum ad annum Christi compl. 1730 tam Arithmeticè quam Geometrice exhibentur

à IOH. GABR. DOPPELMAYR MATH. P.P. Academ. Cæs: Leop. & Nat: Curiosorum, nec non Societatis Regiæ Borussicæ Socio

Operâ IOH. BAPT. HOMANNI Cæs. Maj. Geogr. Norimbergæ.

Cum Privilegio S. Cæs. Majestatis

	CORONA AUSTRALIS	Mag	Long:	Latit:
		H all	° '	° '
A	Quæ foris prvec. ad Austr. in corvi. pvec.	4	♐ 1. 20. 0	♉ 22. 31. 0 A
	SAGITTARIUS.	H all.		
c	In sinistrâ dextro priore contig. austr.	4	♐ 11. 57. 0	♉ 22. 27. 0 A
f	Earum borea	4	♐ 11. 59. 0	♉ 22. 8. 0 A
	PISCIS NOTIUS.	Kepl:		
M	Precedentium pisces quæ antecè	3	♑ 1. 0. 0	♒ 22. 40. 0 A
N	Media	3	♑ 4. 30. 0	♒ 22. 30. 0 A
O	Sequens trium	3	♑ 7. 0. 0	♒ 22. 30. 0 A
P	Quæ hanc præcedit obscura	3	♑ 5. 0. 0	♒ 21. 30. 0 A
	CENTAURUS.	H all.		
Q	In sinistro cubito	3	♑ 16. 29. 0	♒ 26. 25. 0 A
R	In extrema manu sinistra	4	♑ 21. 2. 0	♒ 23. 37. 0 A
S	In eductione corporis humani	3	♑ 11. 33. 0	♒ 28. 49. 0 A
T	Duarum obscurarum sequens	3	♑ 11. 36. 0	♒ 30. 51. 0 A
V	præcedens	3	♑ 10. 38. 0	♒ 30. 20. 0 A
W	In dorsô equino nebula	3	♑ 3. 50. 0	♒ 35. 7. 0 A
X	In lumbis duarum sequens	2	♑ 28. 38 0	♉ 40. 3. 0 A
Y	Præcedens ex illis	4	♑ 27. 38. 0	♉ 40. 3. 0 A
Z	In sinistro femore duarum borea	3	♑ 23. 48. 0	♉ 44. 43. 0 A
a	Australis	5	♑ 25. 52. 0	♉ 45. 28. 0 A
b	E duabus femur sequentibus Austr.	6	♑ 27. 38. 0	♉ 48. 57. 0 A
c	Borea	5	♑ 27. 3. 0	♉ 49. 28. 0 A
d	Clara in alvo	2	♑ 11. 50. 0	♒ 39. 56. 0 A
e, f	De quatuor dicta à nautis Crosiers borea	2	♑ 3. 1. 0	♒ 47. 51. 0 A
g	Australis, per crucis	2	♑ 8. 11. 0	♒ 54. 45. 0 A
h	Præcedens crucis	3	♑ 2. 0. 0	♒ 50. 38. 0 A
i	Sequens crucis	2	♑ 7. 37. 0	♒ 48. 49. 0 A
k	Quæ in pede sinistro	3	♑ 26. 30. 0	♒ 52. 43. 0 A
l	In genu dextro, s. pectus ad ung.	2	♑ 3. 1. 0	♒ 49. 8. 0 A
	Quæ inter hanc et præced. Trian. guli s. ad ung. pedis sinistri	3	♑ 8. 36. 0	♒ 46. 8. 0 A
	LUPUS.	H all		
A	In summo pede posteriori ad brachium centauri borealis	3	♑ 21. 36. 0	♒ 24. 56. 0 A
B	In poplite pedis ejusdem	3	♑ 19. 55. 0	♒ 19. 58. 0 A
C	Duarum magis australium borea	5	♑ 18. 55. 0	♒ 22. 2. 0 A
D	Australis	5	♑ 19. 25. 0	♒ 13. 39. 0 A
E	Parvula contigua pedi post. australis	5	♑ 20. 5. 0	♒ 25. 56. 0 A
F	In armo duarum præcedens	5	♑ 23. 55. 0	♒ 31. 37. 0 A
G	In armo duarum sequens	4	♑ 27. 38. 0	♒ 31. 7. 0 A
H	In medio corpore	4	♑ 26. 23. 0	♒ 35. 7. 0 A
I	In alvo	5	♑ 23. 59. 0	♒ 26. 23. 0 A
K	In femore	5	♑ 23. 36. 0	♒ 31. 37. 0 A
L	In eductione femoris borea	5	♑ 26. 39. 0	♒ 28. 23. 0 A
M	Australis	5	♑ 25. 55. 0	♒ 29. 30. 0 A
N	In summo lumbo	5	♑ 26. 58. 0	♒ 34. 54. 0 A
O	In extrema cauda duarum auster.	5	♑ 18. 4. 0	♒ 30. 6. 0 A
P	Borealis	5	♑ 19. 59. 0	♒ 28. 31. 0 A
	TRIANGULUM AUSTRALE.	H all		
A	Quæ in cuspide	2	♑ 17. 5. 0	♉ 46. 0. 0 A
B	Borea basis	3	♑ 8. 8. 0	♉ 41. 46. 0 A
C	Hanc sequens parva	5	♑ 11. 3. 0	♉ 41. 29. 0 A
D	Australis basi	3	♑ 3. 32. 0	♉ 47. 57. 0 A
E	Parva in medio	5	♑ 6. 34. 0	♉ 45. 8. 0 A
	ARA THURIBULI.	H all		
A	In basi duarum borea	6	♑ 21. 38. 0	♉ 23. 0. 0 A
B	Australis	4	♑ 27. 21. 0	♉ 26. 31. 0 A
C	In medio Aræ	3	♑ 23. 8. 0	♉ 26. 25. 0 A
D	In foco trium borea	3	♑ 15. 30. 0	♉ 30. 0. 0 A
E	Reliquarum duarum contig. austr.	4	♑ 20. 30. 0	♉ 28. 58. 0 A
F	Borea	4	♑ 20. 23. 0	♉ 32. 7. 0 A
G	In medio flamæ	4	♑ 16. 5. 0	♉ 32. 37. 0 A
H	In fumitate flamæ præced.	4	♑ 15. 9. 0	♉ 36. 8. 0 A
I	Sequens	4	♑ 21. 57. 0	♉ 37. 12. 0 A
	PAVO.	H all		
A	Pavonis oculus	2	♑ 20. 3. 0	♉ 36. 6. 0 A
B	Quæ in pectore	3	♑ 24. 44. 0	♉ 46. 51. 0 A
C	In radice alæ sinistræ	3	♑ 18. 44. 0	♉ 49. 47. 0 A
D	In media ala	3	♑ 13. 43. 0	♉ 45. 23. 0 A
E	In eductione caudæ prima	5	♑ 3. 58. 0	♉ 44. 1. 0 A
F	Secunda caudæ	5	♑ 4. 47. 0	♉ 41. 33. 0 A
G	Tertia caudæ	4	♑ 3. 7. 0	♉ 38. 38. 0 A
H	Quarta caudæ	6	♑ 5. 13. 0	♉ 37. 53. 0 A
I	Quinta caudæ	5	♑ 0. 51. 36	♉ 38. 49. 0 A
K	Sexta caudæ	4	♑ 29. 51. 36	♉ 37. 33. 0 A
L	Septima caudæ	3	♑ 27. 25. 0	♉ 40. 4. 30 A
M	Ultima caudæ	4	♑ 24. 10. 36	♉ 31. 9. 0 A
N	In finis. pede Hevelio, sub cauda	4	♑ 24. 56	♉ 48. 3. 0 A
O	In dextro pede Heveliô, in finistro	4	♑ 26. 26	♉ 50. 51. 0 A
	INDUS.	Kepl:		
A	In capite	6	♑ 29. 26. 0	♉ 34. 30. 0 A
B	In axilla dextra	6	♑ 29. 0. 0	♉ 36. 35. 0 A
C	In dextra manu sagitta prima	6	♑ 4. 36. 0	♉ 37. 0. 0 A
D	Secunda	6	♑ 8. 30. 0	♉ 38. 35. 0 A
E	Tertia	6	♑ 0. 0. 0	♉ 40. 0. 0 A
F	In summa parte sagittæ man sin.	3	♑ 8. 0. 0	♉ 37. 35. 0 A
G	In ima	5	♑ 13. 26. 0	♉ 32. 25. 0 A
H	In axilla sinist. occident	6	♑ 24. 56. 0	♉ 33. 55. 0 A
I	Sequens	6	♑ 23. 26. 0	♉ 33. 53. 0 A
K	Orientalior	6	♑ 24. 35. 0	♉ 33. 30. 0 A
L	In pectore	5	♑ 23. 44. 0	♉ 36. 0. 0 A
M	In ventre	4	♑ 23. 4. 0	♉ 39. 15. 0 A
	GRUS.	H all.		
B	In medio colli	3	♑ 16. 9. 0.	♒ 28. 53. 0 A
C	In eductione colli contig: bor:	3	♑ 16. 31. 0.	♒ 28. 18. 0 A
D	Australina	3	♑ 18. 14. 0.	♒ 28. 36. 0 A
E	In dorso duarv' borea, Hevel: in pectore	5	♑ 17. 47. 0	♒ 31. 13. 0 A
F	Australis	5	♑ 17. 44. 0	♒ 31. 31. 0 A
G	In sinistra ala borea, Hevel: in dextra	5	♑ 15. 0. 0.	♒ 31. 21. 0 A
H	Australior	5	♑ 14. 39. 0	♒ 36. 9. 0 A
I	In ala dextra Hevelio sinistra	2	♑ 8. 3. 0.	♒ 32. 47. 0 A
K	In eductione caudæ Hevel: in ventre	2	♑ 18. 26. 0	♒ 33. 20. 0 A
L	In cauda trium borea	4	♑ 16. 51. 0	♒ 30. 40. 0 A
M	Præcedens	4	♑ 14. 56. 0.	♒ 31. 31. 0 A
N	Sequens	4	♑ 13. 3. 0.	♒ 31. 32. 0 A
	MUSCA APIS.	H all.		
A	In capite	4	♑ 15. 25. 0	♉ 33. 7. 0 A
B	In Ala dextra	4	♑ 16. 31. 0	♉ 36. 26. 0 A
C	In Ala sinistra	4	♑ 22. 28. 0	♉ 36. 30. 0 A
D	In cauda	5	♑ 20. 38. 0	♉ 38. 34. 0 A
	CHAMÆLEON.	H all.		
A	Ad collum	5	♑ 1. 39. 0.	♉ 63. 38. 0 A
B	In prioribus pedibus	5	♑ 28. 35. 0	♉ 63. 39. 0 A
C	In posterioribus pedibus	5	♑ 26. 37. 0.	♉ 68. 7. 0 A
D	In dorso	5	♑ 1. 54. 0.	♉ 67. 50. 0 A
E	In eductione caudæ præcedens	5	♑ 3. 54. 0.	♉ 71. 3. 0 A
F	Sequens	5	♑ 3. 48. 0.	♉ 70. 30. 0 A
G	In media caudæ præcedens	5	♑ 0. 25. 0.	♉ 73. 29. 0 A
H	Sequens	6	♑ 1. 47. 0.	♉ 73. 3. 0 A
I	In extremitate caudæ borealis	8	♑ 25. 30. 0	♉ 75. 27. 0 A
K	Australina	5	♑ 27. 13. 0	♉ 78. 3. 0 A
	APUS, AVIS INDICA.	H all.		
A	In capite	6	♑ 21. 7. 0.	♉ 34. 28. 0 A
B	In collo	6	♑ 21. 26. 0	♉ 36. 42. 0 A
C	Trium in eductione caudæ bor:	5	♑ 19. 6. 0.	♉ 36. 22. 0 A
D	Media	6	♑ 17. 37. 0.	♉ 33. 0. 0 A
E	Australina	4	♑ 18. 23. 0	♉ 36. 8. 0 A
F	In borea parte caudæ contig: præc:	6	♑ 9. 52. 0.	♉ 33. 3. 0 A
G	Sequens	6	♑ 10. 51. 0.	♉ 31. 44. 0 A
H	In media cauda trium borealior	4	♑ 10. 36. 0.	♉ 38. 5. 0 A
I	Media	4	♑ 10. 4. 0.	♉ 39. 37. 0 A
K	Australior	5	♑ 10. 58. 0	♉ 60. 24. 0 A
L	Polo vicinior	4	♑ 16. 36. 0	♉ 61. 8. 0 A
	HYDRUS.	H all.		
A	Caput Hydri	3	♑ 7. 59. 0.	♉ 69. 9. 0 A
B	Prima colli	3	♑ 28. 2. 0.	♉ 67. 30. 0 A
C	Secunda	3	♑ 28. 22. 0.	♉ 68. 52. 0 A
D	Tertia	3	♑ 27. 57. 0.	♉ 73. 6. 0 A
E	Quarta	5	♑ 0. 26. 0.	♉ 71. 39. 0 A
F	Inter utramque nubec. duarv' seq:	3	♑ 6. 27. 0.	♉ 76. 43. 0 A
G	Præcedens	6	♑ 6. 36. 0.	♉ 78. 39. 0 A
H	Quæ adjacet nubeculæ minori	3	♑ 26. 50. 0	♉ 86. 27. 0 A
I	Duarum collum hydri seq. borea	3	♑ 3. 38. 0	♉ 78. 6. 0 A
K	Præcedens et australina	3	♑ 27. 27. 0	♉ 76. 6. 0 A
L	Antepenultima caudæ	3	♑ 29. 51. 0.	♉ 60. 0. 0 A
M	Penultima caudæ	5	♑ 16. 8. 0.	♉ 58. 30. 0 A
N	Ultima caudæ	5	♑ 19. 39. 0	♉ 56. 0. 0 A
	TOUCAN ANSER AMER.	H all.		
A	In extremo rostro	3	♑ 5. 40. 0.	♉ 55. 24. 0 A
B	In capite	3	♑ 26. 32. 0	♉ 57. 35. 0 A
C	In ejusdem ala dextræ superi.	3	♑ 17. 55. 0.	♉ 54. 49. 0 A
D	Inferior	5	♑ 16. 23. 0.	♉ 55. 30. 0 A
E	In media ala	3	♑ 18. 7. 0	♉ 57. 33. 0 A
F	Hanc præcedens	5	♑ 19. 49. 0	♉ 56. 30. 0 A
G	In dorso, vel potius in ala dext: ulti:	3	♑ 22. 33. 0	♉ 57. 13. 0 A
H	In cauda vel potius ad pedes	5	♑ 20. 30. 0	♉ 49. 44. 0 A
I	In rami folio s. nuce myrtifica	4	♑ 18. 0.	♉ 49. 46. 0 A



	PHOENIX.	Mag	Long	Latit:
		H all		
C	In ancone alæ sinistræ	3	♑ 46. 0.	♉ 41. 55. 0 A
D	In ala sinistra trium australis	4	♑ 49. 40. 0	♒ 49. 0. 0 A
G	In extrema ala dextra	4	♑ 51. 0. 0	♉ 51. 30. 0 A
H	Eundem alæ adjecto	4	♑ 11. 54. 0.	♉ 44. 35. 0 A
I	Ad ped. sinistr. Hevelio in pectore	4	♑ 7. 43. 0.	♉ 46. 30. 0 A
K	In foco sub ala dextra australis	3	♑ 59. 36. 0.	♉ 49. 30. 0 A
L	Borealis Hevelio in ala dextra	3	♑ 16. 22. 0.	♉ 48. 30. 0 A
M	In foco sub ala sinistr: prvec. s. in ped. sin.	4	♑ 11. 22. 0.	♉ 48. 22. 0 A
N	Sequens Hevelio in pede dextro	3	♑ 23. 23. 0.	♉ 49. 4. 0 A
	ROBUR CAROLI	H all.		
A	Quæ ad radicem	2	♑ 18. 30. 0	♉ 78. 35. 0 A
B	In summo trunco	3	♑ 22. 22. 0	♉ 84. 30. 0 A
C	In ramis præced. de quatuor bor.	4	♑ 14. 0. 0	♉ 86. 0. 0 A
D	Sequens	4	♑ 17. 21. 0	♉ 88. 57. 0 A
E	Præcedens	4	♑ 16. 31. 0	♉ 89. 31. 0 A
F	Media	4	♑ 15. 0. 0	♉ 93. 21. 0 A
G	In ramis seqq. duarum borea	6	♑ 0. 44. 0.	♉ 98. 46. 0 A
H	Australina	4	♑ 7. 0. 0.	♉ 96. 34. 0 A
I	In summa arbore duarum præced.	3	♑ 3. 30. 0.	♉ 91. 5. 0 A
K	Sequens	3	♑ 6. 44. 0.	♉ 91. 6. 0 A
L	Infirmium ad truncum præced.	4	♑ 19. 6. 0.	♉ 87. 30. 0 A
M	Sequens	4	♑ 3. 36. 0.	♉ 87. 25. 0 A
	PISCIS VOLANS.	H all		
A	In capite	5	♑ 36. 46. 0	♉ 76. 33. 0 A
B	In medio corpore	5	♑ 40. 35. 0	♉ 77. 46. 0 A
C	In cauda	5	♑ 6. 0. 0.	♉ 80. 38. 0 A
D	In ala dextra superior	5	♑ 11. 39. 0.	♉ 73. 35. 0 A
E	Inferior	4	♑ 18. 33. 0.	♉ 80. 29. 0 A
F	In ala sinistra superior	6	♑ 3. 33. 0	♉ 76. 47. 0 A
G	Inferior	5	♑ 11. 34. 0	♉ 79. 24. 0 A
H	Infernus inter Chamæl: et pisc. vol.	5	♑ 18. 38. 0	♉ 86. 35. 0 A
	DORADO, XIPHIAS.	H all.		
A	In capite	6	♑ 6. 34. 0	♉ 87. 35. 0 A
B	In Branchiis	6	♑ 13. 33. 0	♉ 85. 27. 0 A
C	Circa caput	5	♑ 15. 3. 0	♉ 88. 35. 0 A
D	Quæ supra dorsum	4	♑ 28. 37. 0	♉ 88. 6. 0 A
E	Quæ in cauda	5	♑ 1. 7. 0.	♉ 84. 39. 0 A
F	In extrema cauda	6	♑ 4. 47. 0	♉ 70. 33. 0 A
	ERIDANUS.	H all.		
n	Omnes quatuor præced diarv' seq.	5	♑ 1. 33. 0	♉ 85. 5. 0 A
o	Earum præcedens	5	♑ 28. 39. 0	♉ 58. 0. 0 A
p	Ultima Fluminis	3	♑ 14. 37. 0.	♉ 33. 46. 0 A
q	Hanc præcedens	4	♑ 14. 44. 0.	♉ 31. 34. 0 A
r	Trium in recta dejendentium bor:	4	♑ 21. 51. 0.	♉ 26. 15. 0 A
s	Earum media	4	♑ 1. 51. 0.	♉ 26. 59. 0 A
t	Trium australina	4	♑ 26. 51. 0.	♉ 38. 58. 0 A
u	Hanc præcedens	4	♑ 22. 7. 0.	♉ 56. 58. 0 A
w	Ultima Eridani. Achernar	1	♑ 12. 16. 0.	♉ 59. 18. 0 A
x	Infirmis inter fluv: et caud. Xiph:	6	♑ 28. 5. 0.	♉ 80. 34. 0 A
	ARGO NAVIS.	H all.		
O	In statione nali borealis' sequens	5	♑ 29. 57. 0	♉ 57. 12. 0 A
P	Hevelio in malo inferiorum sequens	5	♑ 28. 39. 0	♉ 58. 39. 0 A
Q	Precedens Hevelio in malo infer: prec.	5	♑ 29. 39. 0	♉ 58. 39. 0 A
R	Australis' sequens Hevelio in tertio	5	♑ 3. 44. 0.	♉ 60. 8. 0 A
	seato trium superiorum media			
	Precedens Hevelio in tertio seato trium' superiorum præcedens	5	♑ 4. 48. 0.	♉ 60. 8. 0 A
X	In loco transf: Hevelio sub velo in fun:	2	♑ 7. 28. 0.	♉ 55. 0. 0 A
Y	Et eod. sectione australior. Hevelio in			
	tertio seato trium' superiorum sequens	5	♑ 9. 0. 0.	♉ 59. 39. 0 A
b	Lucida in stratione Hevelio Lucida	2	♑ 23. 36. 0	♉ 63. 46. 0 A
	in secundo seato superior			
c	Fulgens supra carinam Hevelio fulgens	2	♑ 29. 39. 0	♉ 70. 34. 0 A
	ad secundum remum			
d	Quæ inter hanc et lucidā' in stratione,			
	Hevelio, in secundo seato inferior	3	♑ 26. 58. 0	♉ 70. 37. 0 A
e	Duarv' hanc sequentiu' australior. Heve-			
	lio, in tertio seato duar: infer: australior	3	♑ 29. 7. 0.	♉ 67. 11. 0 A
f	Borealior. Hevelio, in tert: seato duar-			
	um inferiarum borealior	4	♑ 10. 57. 0.	♉ 66. 36. 0 A
g	Hæc sequens, in borea parte sectionis			
	carinæ Hevelio, in quarto seato	3	♑ 25. 5. 0.	♉ 63. 43. 0 A
h	In eod. sectione australior. Hevelio, in			
	quarto remo superior	4	♑ 0. 26. 0	♉ 69. 35. 0 A
i	Hæc etiam australior Hevelio, in quarto			
	remo medio	5	♑ 4. 51. 0	♉ 65. 43. 0 A
k	Duarv' sectione' hanc præced seq:			
	Hevelio, inter tertiū et quartū remum	6	♑ 1. 33. 0.	♉ 67. 6. 0 A
l	Earum precedens Hevelio, in tertio			
	remo superior	4	♑ 29. 36. 0.	♉ 67. 33. 0 A
m	Infirmis inter has et pisces volan			
	tes' ber: Hevelio, inter 2. et 3. remum	5	♑ 29. 54. 0.	♉ 70. 8. 0 A
n	Earum sequens Hevelio, in tertio			
	remo inferior	5	♑ 7. 5. 0	♉ 69. 28. 0 A
o	Sectione' sequentiu' borea. Hevelio			
	in quinto et ultimo seato	5	♑ 14. 0. 0.	♉ 59. 58. 0 A
P	Australina Hevelio, in quarto remo			
	inferior	5	♑ 13. 36. 0	♉ 66. 39. 0 A
s	Australina in temone, Canobus	1	♑ 11. 12. 0	♉ 75. 46. 0 A
t	Quæ sequitur Canobum	3	♑ 12. 58. 0.	♉ 82. 49. 0 A
u	Quæ præcedit Canobum infirmis			
	Hevelio ad subcornuculū in carina	4	♑ 28. 55. 0	♉ 74. 25. 0 A
w	Quæ inter Canobū et piscē volantē			
	Hevelio in primo remo	4	♑ 20. 22. 0	♉ 83. 3. 0 A
x	Quæ sectionem transiri sequitur			
	ad boream. Hevelio. in parte infers.			
	ore veli	4	♑ 11. 0. 0.	♉ 53. 30. 0 A

I.

Tabula pro definiendis Longitudinibus Stellarum fixarum per singulos años ab anno 1700 ad annum 1760.

Subtr: Diff.	Differentia	Add: Diff	Subtr: Diff	Differentia	Add: Diff
An. compl	Min. Sec. Tert.	An. compl	An. compl	Min. Sec. Tert.	An. compl
1700	25. 26. 0	1760	1725	12. 43. 0	1725.
1701	24. 35. 8	1759	1726	11. 52. 8	1724.
1702	23. 44. 16	1758	1727	11. 1. 16	1723.
1703	22. 53. 24	1757	1728	10. 10. 24	1722.
1704	22. 2. 32	1756	1729	9. 19. 32	1721.
1705	21. 11. 40	1755	1730	8. 28. 40	1720.
1706	20. 20. 48	1754	1731	7. 37. 48	1719.
1707	19. 29. 56	1753	1732	6. 46. 56	1718.
1708	18. 39. 4	1752	1733	5. 56. 4	1717.
1709	17. 48 14	1751	1734	5. 5. 12.	1716.
1710	16. 57 20	1760	1735	4. 14. 20.	1735.
1711	16. 6 28	1759	1736	3. 23. 28.	1734.
1712	15. 15 36	1758	1737	2. 32. 36.	1733.
1713	14. 24 44	1757	1738	1. 41. 44.	1732.
1714	13. 33 52	1756	1739	0. 50. 52.	1731.

II.

Motus Stellarum fixarum pro singulis mensibus.

Mens: compl.	Sec. Tert.	Mens: compl.	Sec. Tert.	Mens: compl.	Sec. Tert.
Januarius	4. 14.	Majus.	23. 32.	Septembris	38. 9.
Februarius	8. 29.	Junius.	28. 26.	Octobris	42. 23.
Martius	12. 43.	Julius.	32. 40.	Novembr.	46. 38.
Aprilis.	16. 57.	Augustus.	33. 55.	Decembr.	50. 52.

III.

Motus Stellarum fixarum diurnus.

Dies	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Mot: diurn	S. T. 0. 8.	S. T. 0. 16.	S. T. 0. 25	S. T. 0. 33	S. T. 0. 42	S. T. 0. 50	S. T. 0. 59	S. T. 1. 7.	S. T. 1. 15.	S. T. 1. 24.
Dies	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.
Mot: diurn	S T 1. 33	S T 1. 41.	S T 1. 50	S T 1. 58	S T 2. 7.	S T 2. 15.	S T 2. 23.	S T 2. 32	S T 2. 40	S T 2. 49
Dies	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
Mot: diurn	S. T. 2. 57.	S. T. 3. 6.	S. T. 3. 14.	S. T. 3. 23.	S. T. 3. 31.	S. T. 3. 40.	S. T. 3. 48.	S. T. 3. 57.	S. T. 4. 5.	S. T. 4. 14.

Usus præcedentium Tabularum.

Si quæratur Stellæ cujusdam fixæ Longitudo ♈. ♉. Sirii pro die 16 mensis Augusti anni. 1736 currentis, subtrahatur differentia ānī antecedentis completi in Tabu. superiori prima exhibita 32 Min. 43 Sec. a Longitudine Sirii quæ in Tabulis hiseo nostris Uranographicis ad annum 1730 completum est 10 Grad. 25. 30. 59 reperta erit 10 Grad. 53 Min. 7 Sec. 09 pro Longitudine anni 1735 complet. jam mensis præcedens completus Julius in Tabula II. 29. Sec. 40 Tert. respondent. et dies 16 in Tabula III. 2 Sec. 15 Tert. colligantur in unam summam quæ est 31 Sec. et 55 Tert. (pro qua 32 Sec. ju mi possunt ad dant. hæc superiori Long. 10. Grad. 53 Min. 7 Sec. Suma erit 10 Grad. 53 Min. 39 Sec. 09 pro Long. Sirii quæsita. Hoc anno 1730 completo omnes differentiæ additionis

THEORIA COMETARVM,

in qua præcipua eorum Phænomena ex recentiorum Astronomorum Observationibus secundum I. Newtoni et cel. Whistoni Hypothesin geometrice deducta cum aliis exhibentur à IOH. GABR. DOPPELMAIERO, Acad. Cæs. Leopoldino-Carol. Nat. Cur. Regiarum Societatum Britannicæ & Boruss: Sodali, et Math. Prof. Publ. Sumptibus Heredum Homannianorum, Noribergæ.

Hypothesis Keplerana

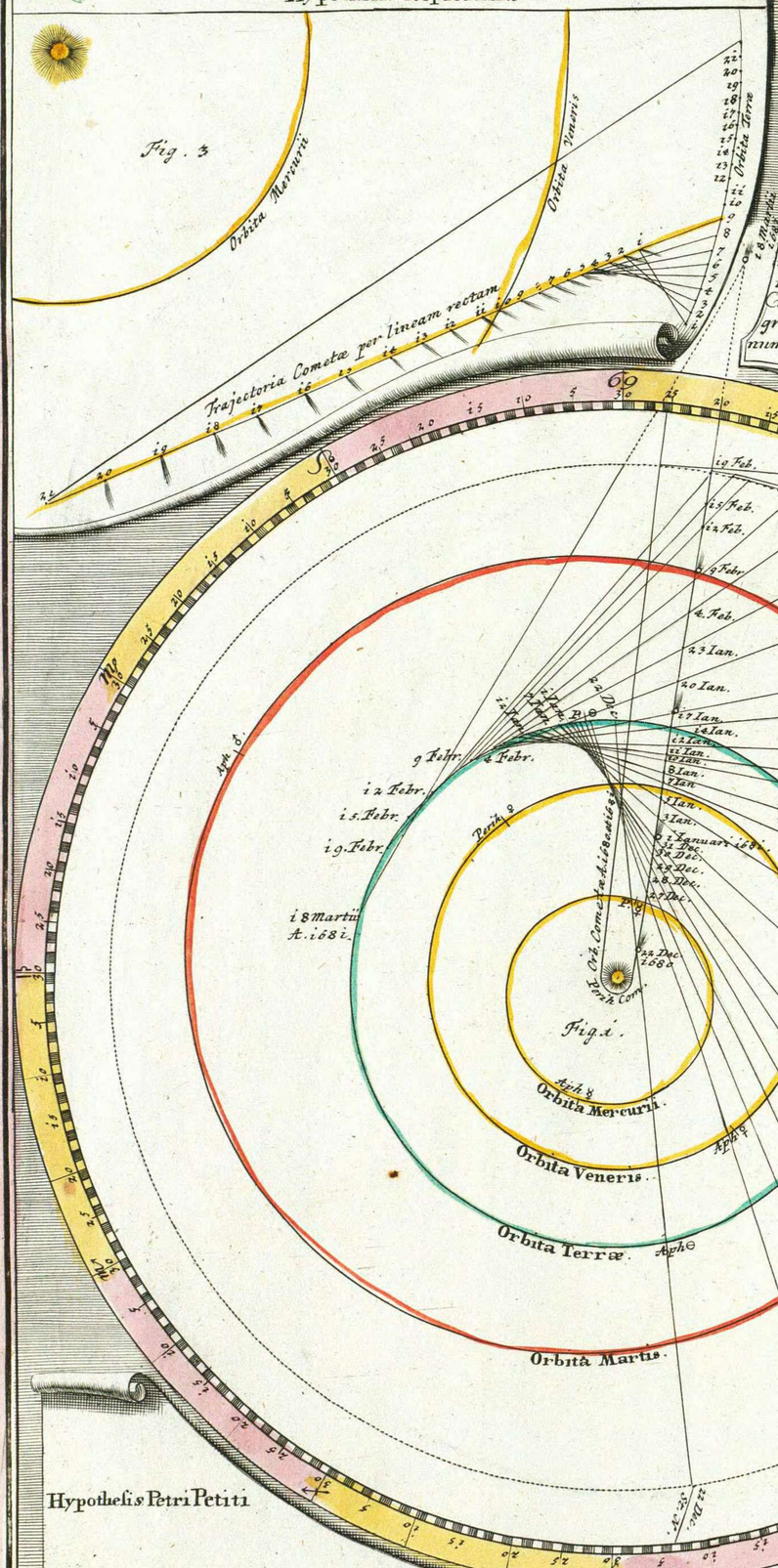


Fig. 3
Orbita Mercurii
Orbita Veneris
Orbita Terræ
Trajectoria Cometæ per lineam rectam
Aph. ☉
Aph. ☿
Aph. ♀
Aph. ♂
Orbita Mercurii.
Orbita Veneris.
Orbita Terræ.
Orbita Martis.
Fig. 4.
Orb. Com. Terræ
Perih. ☿
Perih. ♀
Perih. ♂
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Perih. ♄
Perih. ☉
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MOTVS COMETARUM IN HEMISPHÆRIO BOREALI

qui intra 210 annos ab an. 1530 usque ad an. 1740, cum sex stellis geometrice exhibiti à **IOH. GABR. DOPPELMAIERO** *Acad. Imp. Leopol. — Sumtibus Heredum Homannianorum*

novis per hoc tempus visis, à præstantissimis Astronomis observati, dino-Carol. Nat. Curios. Societatum q. Regg. Britan. et Borussicæ Soc. et P.P. Norimbergæ cum Priv. S.C.M.

Hypothesis Ieremiæ Horroccii.

Hypothesis Iacobi Bernoulli.

Fig. 1.

Terræ

Orbita

Via Cometæ

Fig. 2.

Orbita Saturni

Terræ

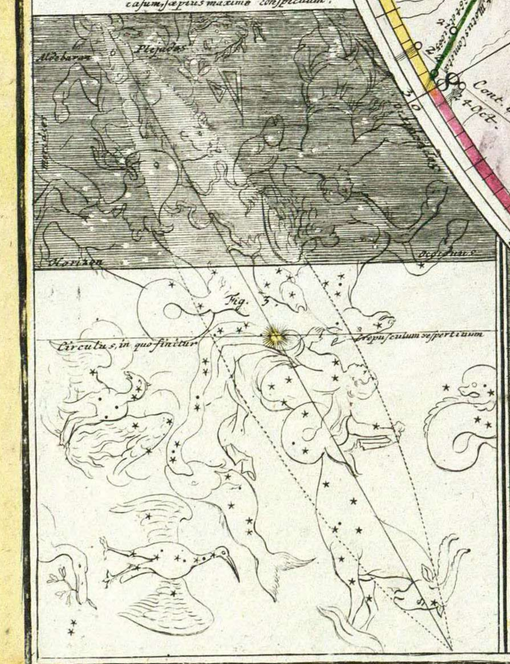
De Cometarum motu per duo sæcula hactenus observato.

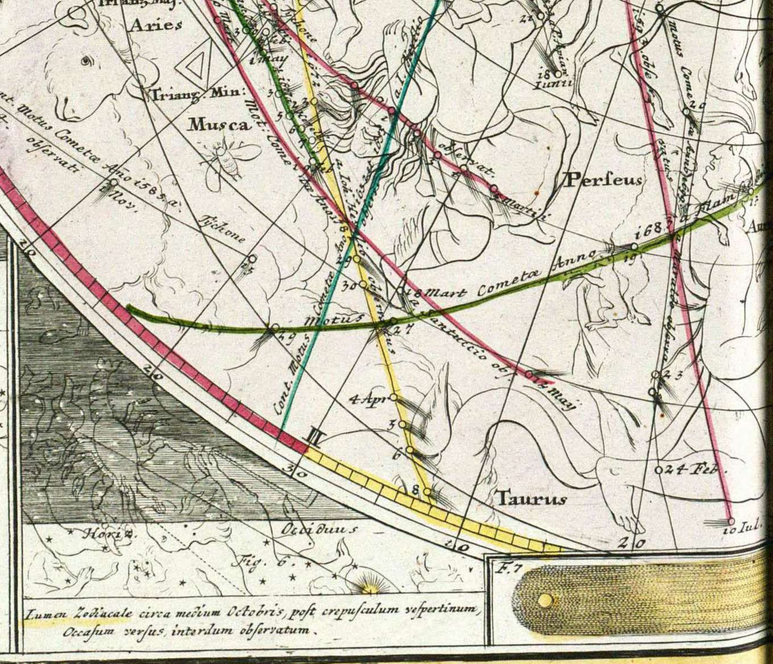
Cometæ quorum motus, respecturi unum ex observationibus intra 210 annos curatius institutis graphica delineatione hic exhibiti, numerum 38 constituunt. Inter hos 27 boreales, 4 australes; 5 boreo-australes et 2 austro-boreales; porro ex his, quoad motum apparentem, 27 directi; 10 retrogradi, 2 directo-retrogradi, et 3 retrogrado-directi, sistuntur; qui et motu suo a planetarum motu diverso, caudæque eorundem mutabiles et Soli oppositæ fere versus omnes mundi plagas feruntur, imò quaqua versum tenderent, si eorum corpora prout Ier. Horroccius statuit, e Sole evibrati, pyroboli rum instar, in altum projecta, et perorbem in Cœlo lata, in Solem redirent: ve, rum ex aliis Hypothesibus, ut et Bernoulliana, (vide Fig. 2.) quam tamen difficultatibus obnoxiam Montereus indicavit per ennitatem corporum motus horum rectius explicatur.

De motu fixarum proprio.

Motum hunc stellarum potius apparentem, quam verum esse celeberrimi Astronomi statuunt, et mutationem situs axi terræ haud exacte parallelismum servanti tribuunt: hoc per Schematismum explicant in quo A.D. Ecliptica (vide Fig. 4. tabul. seq.) C. Axis Ecliptica E. Polus Eclipticæ G.P. circulus, in quo P. Polus Terræ, in æquali semper distantia a Polo Ecliptica, nutatione quadam a Pin O cum axe et illius Æquatore in antecedentia fertur, ex qua retrocessione fixas motu quodam, et quidem lentissimo, qui per annum 50 Min. secundis æquatis apparentur in consequentia procedit: Experientia docuit, quæ per observationes firmata.

Lumen Zodiacale in situ nostro ad parallelum ab Æquatore 30 fere graduum circa finem Febr. et initium Martii, finito crepusculo vespert. versus Occasum sæpius maxime conspicuum.





Lumen Zodiacale circa medium Octobris, post crepusculum vespertinum, Occasum versus, interdum observatum.

Fig. 7

Lumen Zodiacale circa initium Martii ante crepusculum matutinum, versus ortum, raro spectandum.

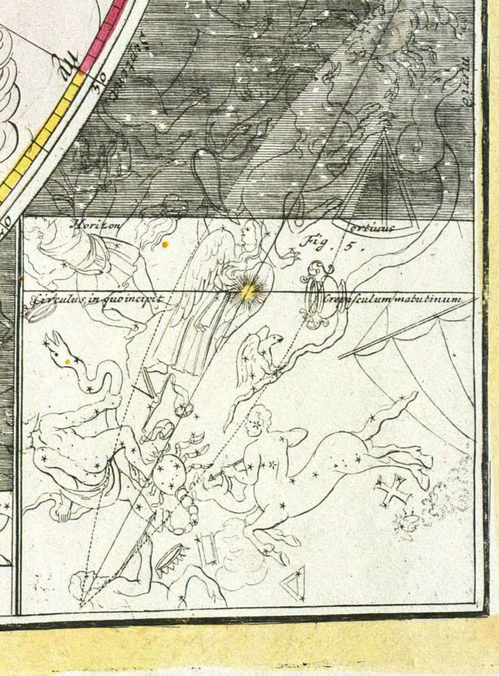
Delumine Zodiacali annuo.

Lumen Zodiacale, quod procul dubio Solis atmosphæram forme lenticulari repræsentem, constituit, omnium primo D. Childrey, Anglus, ad annum 1659 dein ab anno 1681 Classinus P. Hookius & Kirchius 69, Cassinus 83, Derhamus, Hairamus, aliique sæpissime, cum nostro ævo id frequentius quam olim apparuerit, curatius contemplati, exque ipsis inæquitate portionem tantum illius sub figura trianguli scaleni, quoad ejus altitudinem et latitudinem perpetuo variabile, tam circa vernum (vide fig. 3. et 4.) quam autumnale tempus (vide fig. 5. et 6.) super Horizontem occiduum et orientum, in situ cum Zodiaco Cunctæ Zodiacale dictum eodem in nostra Sphæra inclinato, post crepuscula vespertina et ante matutina interdum sub oculos cadere, adeo quidem, ne ut porro, attendatur, operæ pretium sit.

De parallaxi stellæ polaris annua.

Cel. Manfredius ex observationibus, per 8 annos circa polarem stellam, promotu terræ stabilienda demonstrabilem esse non inhibitivibus quam singulis annis percepisset, latitudinis angulum S.I.E. (vid. Fig. 2. et Inseq. Tab.) minorem mense Decembri, existisse, At vero cel. Lac. Cassinus variationem illam ex alia caussa ortam monstrare conatus, quod scil. dum axis Ecliptica per Terræ centrum ductus circulum E.L. et axis Terræ circulum M.Q. motu annuo describit, hujus periphæriæ N.Q. non linearem circularem, sed aliam curvam in Sphæræ Superficie exhibeat in qua apparens mundi Polus motus stellæ fixæ ad Vinterdum propior; interdum remotior aberrat. Denig demonstrat, quod et latitudo stellæ interdum minor, interdum major, revariatur; declinatio tamen non semper eandem servat, quatuor regulamque pluribus, Cassinus (N.P. Fig. 2. inclusum et AR. S.E. pag. 42. etc. Astrogo mem sphæra, etc.

Lumen Zodiacale in situ paraptæ undem Parallelum circa medium Octobris ante crepusculum matutinum versus ortum interdum spectabile.



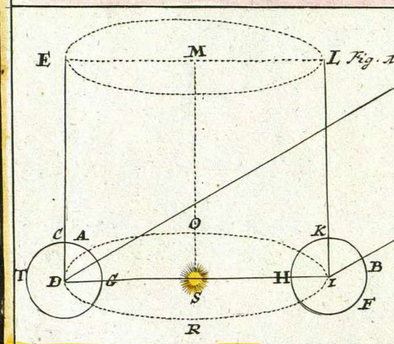
MOTVS COMETARUM IN HE

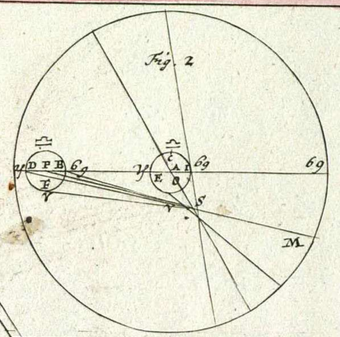
qui intra annum 1530 et 1740 cum duabus stellis novis, nostro tempore
a IOH. GABR. DOPPELMAIERO, Acad. Imp. Leopoldino-Carolinæ Nat. Curios. et
Sumtibus Heredum Homannianorum

MISPHÆRIO AVSTRALI,

28

visis, a celeberrimis Astronomis observati, geometrice nunc descripti.
Societatum Regiarum, Britannicæ et Borussicæ, Sodali, nec non Mathem. Prof. Publ.
Norimbergæ, cum Pr. S. C. M.





Designatio Cometarum, quorum motus intra annos 1530 et 1740 ab Astronomis observati.

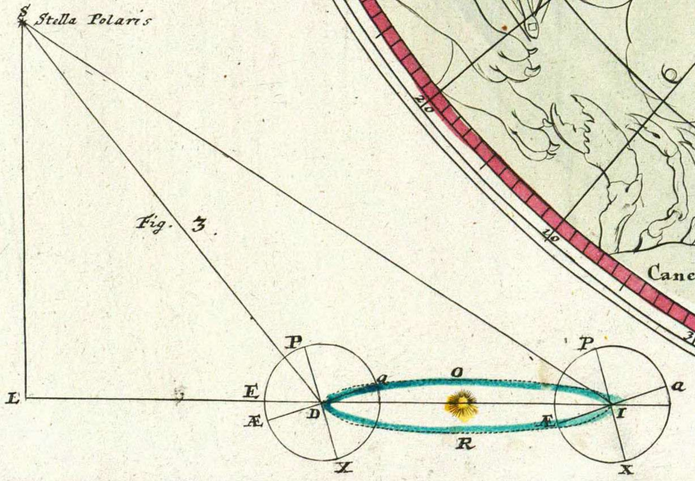
Num. ord.	Annus apparitionis	Observatores.	Situs Cometarum.	et motus eorundem
1	1531	P. Apian.	borealis	directus
2	1532	Idem.	austrobor.	retrog. dir.
3	1533	Idem.	borealis	retrogradus.
4	1556	Leovitius.	borealis	retrogr.
5	1576	Homilius	borealis	dir. retrogr.
6	1577 Initio	Tycho.	borealis.	directus.
7	1580	Hagecius	borealis.	retrogr.
8	1582	Santuccij	borealis	retrogr. directus.
9	1585	Tycho.	austroboreal.	directus.
10	1590	Idem.	borealis.	directus.
11	1593	.....	borealis	retrograd.
12	1596	Rothmann	borealis	directus.
13	1597	Santuccij	borealis	retrograd.
14	1607	I. Keplerus	borealis	retrograd.
15	1618	Idem.	borealis	retrograd.
16	1618 Init. 19.	Id. et Cassatus.	borealis	retrograd.
17	1652 Init. 22.	I. Hevelius	austroboreal.	retrograd.
18	1661	Idem.	borealis	retrograd.
19	1664 ultimo	Idem.	austro, boreal.	retrograd.
20	1665	Idem.	borealis	directus
21	1672	Idem.	boreo. austr.	directus.
22	1677	Idem.	borealis.	directus.
23	1680	Bmthæus Cellius, et Cassinus. Flamst.	australis.	directus.
24	1680	Cassinus. et Flamst.	borealis	directus.

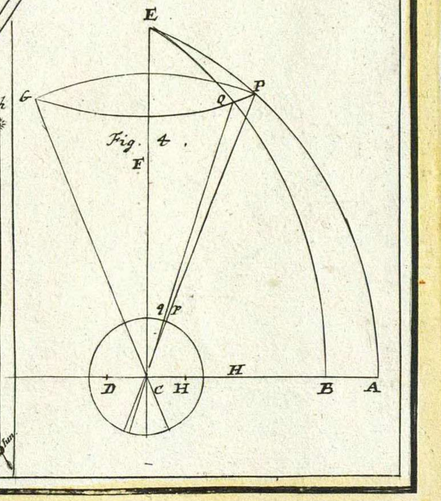
Continuatio præcedentis Tabulæ.

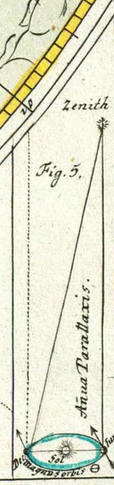
Num. ord.	Annus apparitionis.	Observatores.	Situs Comet.	et motus eorundem.
25	1682	Flamsted.	borealis	directus.
26	1683	Idem	boreaustr.	retrogr.
27	1684	Blanchinus et Giampino & Kirchius.	borealis.	directus.
28	1686		borealis	directus.
29	1689	PP. Iesuitæ in Pondiche,	australis.	directus.
30	1698	de la Hire.	borealis.	retrogr.
31	1699	Maraldus	boreaustr.	directus.
32	1702	Blanchinus et G. Kirchius	borealis	retrogr.
33	1706	Cassinus	borealis	retrograd.
34	1707	Maraldus	borealis	dir. retrog.
35	1718	Chr. Kirch.	borealis	retrograd.
36	1723	Bradleius et Maraldus Blanchinus.	austroboreal.	retr. dir.
37	1729	Maraldus	borealis.	retrograd.
38	1737	Mayerius	australis	directus

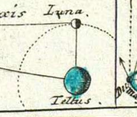
Stellæ præcipuæ, quas Observatoribus celeberr. a Tychonis temporibus ad nostra apparuerunt, novæ.

Num. ord.	Asterismi, in quibus hæ stellæ reperiuntur.	Annus de cessionis	Observatores.
1	In cathed. Cassiopeæ B	1572	Tycho.
2	In Collo Ceti A	1596	Dav. Fabritius
3	In pectore Cygni B	1600	Guil. Janssonius.
4	In dextro pede Serpentarii B	1604	I. Keplerus
5	In cingulo Andromedæ B.	1612	Marius.
6	Infra vel circa caput Cygni B.	1670	P. Anthelmius et Hevelius.
7	In Collo Cygni B.	1686	God. Kirchius
8	In cauda Hydræ A.	1704	Maraldus









ASTRONOMIA COMPARATIVA

in qua præcipua Planetarum phænomena ex Observationibus deducta, è Sole, Mercurio, Venere et Luna exhibentur

à IOH. GAB: DOPPELMAIERO *Acad. Imper. Leopoldino-Carolinæ Nat. Curios. Regiarumque Societatum Britañicæ et Borussicæ Sodali, ut et Mathem. Prof. Publ.*

Sumtibus Heredum Homañianorum cum P.S.C.M.

Hypothesis Tychonica, posito oculo in Mercurio ad sensum immobili.

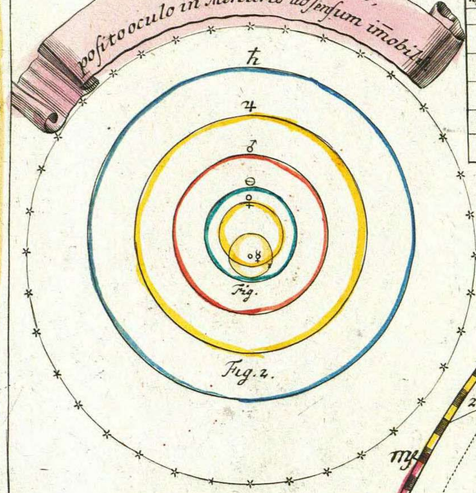


Fig. 2.

E Mercurio.

in planeta	Locus obvisus	Ang. Inclin. Orbitæ
	Grad. Min.	Gr. Min.
☿	20. 54. ♎	4. 21
☉	14. 3. ♏	6. 54
♂	12. 41 ♏	5. 4.
♃	4. 15. ♏	6. 12.
♄	22. 32. ♎	6. 26

Fig. 6.

E Venere.

in planeta	Locus obvisus	Ang. Inclin. Orbitæ
	Grad. Min.	Gr. Min.
☿	20. 54 ♈	4. 21
☉	14. 39. ♐	3. 22
♂	10. 4. ♑	1. 54.
♃	1. 24 ♐	2. 12
♄	25. 59. ♏	2. 4½

Fig. 7.

Hypothesis Tychonica, ita quam è Venere Observatoris oculus immobilis ponitur.

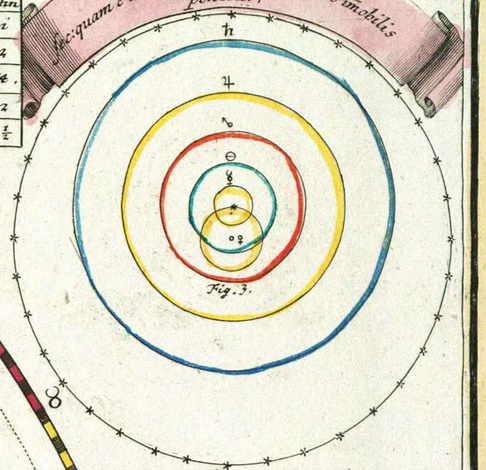
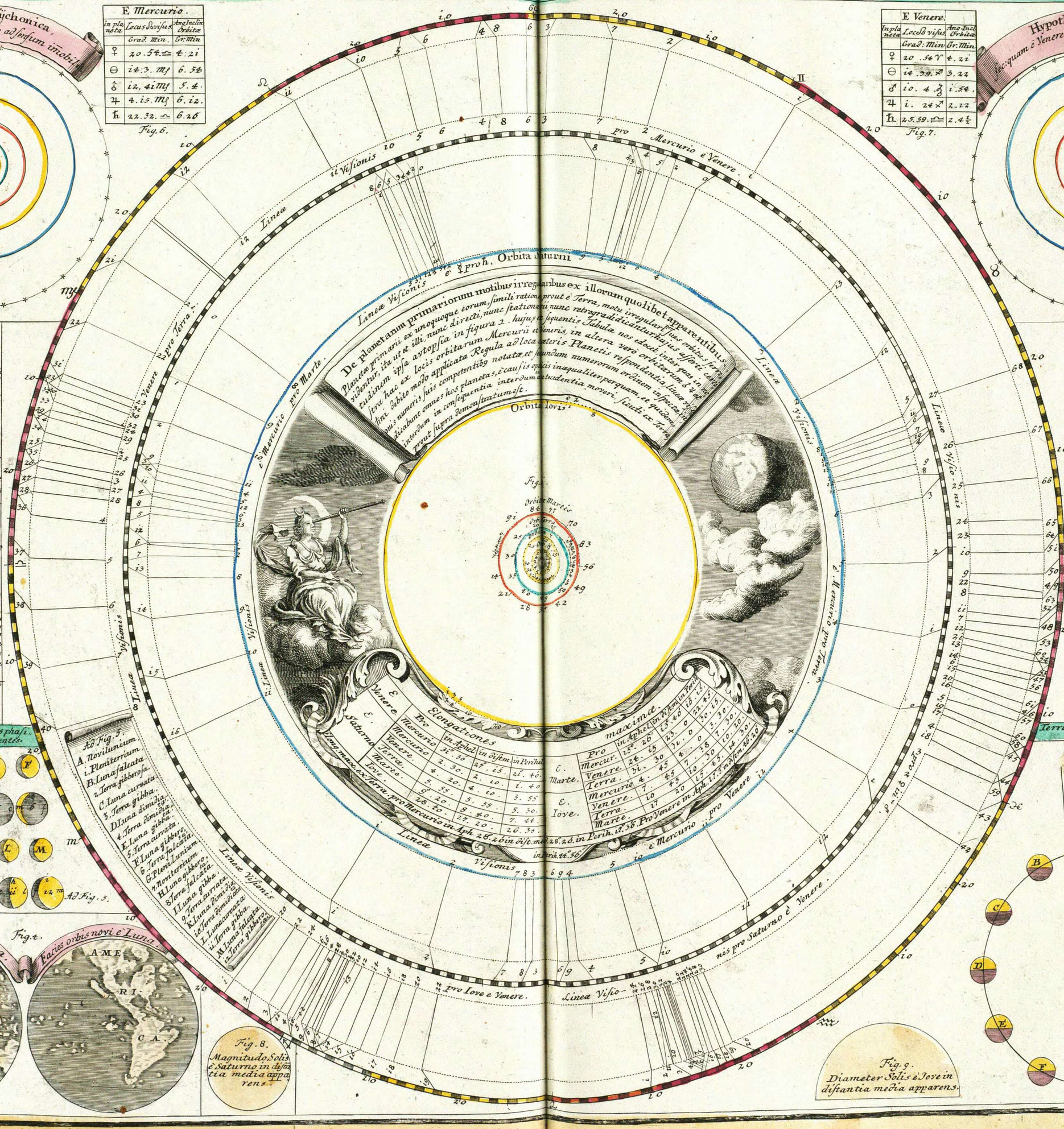


Fig. 3.



De Astronomia in Sole comparativa.

Spectator in Solis centro constitutus, et ubilibus luce non impeditus Astronomiam omnium simplicissimam concipiet planè enim hic cessat in planetis primariis irregularitas motuum optica, ac physica tantum, pro variis illorum distantiis, per cujus inspectionem definienda, notanda venit. Fixa in eodem situ, in quo è Terra, apparebunt, cum hac per orbitam circa solem delata nec minimam mutationem in stellis hisce, ob immensam earum distantiam, motui suo involvat hinc planetarum horum periodi Cum semper sint directi, et ad easdem fixas redeant, et ex diversis temporis periodis ordo eorum, facile elicientur motus vero Satellitum tanto difficilius et methodo eadem, prout apud nos, indagabuntur.

De Astronomia è Mercurio comparativa

Observator in Mercurio positus, et Soli triplo propior quam è Terra, redditus diametrum solarem triple fere latiorem conspiciet hinc et discum ut et lucem et calorem illius septuplo majorem (si cætera paria) imo et maculas solis numero et magnitudine notabiliores quam apud nos, percipiet. De nychthemeri spatio, quia motus Mercurii centralis et de ani tempestatibus, quia inclinatio axis hactenus nos latet, nihil nobis constat: interim vero certum, annum Mercurii, quo ipse periodum absolvit, tribus mensibus majoris fere æqualem esse, ex hoc planeta, simultus Soli propior, omnes planetas Superiores deprehendet Spectator, quorum phænomena cum phænomenis Martis, Jovis et Saturni, è nostra Terra perceptis, conveniunt ex his ille loca Solis et planetarum, prout è Terra fit, investigabit, Tabulas tunc conficiet in Astronomiæ mercurialis incrementum.

De Astronomia è Venere comparativa

Observator in Venere Solis diametrum apparentem duplo fere minorem quam in Mercurio, et sesquialtero majorem, quia è Terra deprehendet ibi locatus, hinc discum Solis, lucem et calorem ejus majorem plus duplo quam apud nos sentiet, videbit quoque planetas superiores quorum phænomena cum illis Martis, Jovis et ♄ Terra concordant, unum vero inferiorem, Mercurium, nunquam longius quam 38 gradus evagantem cujus apparentia iisdem Veneris è Terra similes. De Nychthemeri quantitate, cum D. Cassinus et Fr. Blanchinus in hac discrepent, multi sunt dubii, interim tamen ex observationibus confirmatum, Venerem circa centrum moveri, annumque ibidem fere 7½ mensibus nostris æqualem motui suo periodico conficere, per quam periodum omnes fixas in eodem situ, ac nos in Terra spectabit. De Astronomia è Luna relpectu Terræ comparativa.

Spectator circa hemisphærii lunaris medium Terræ perpetuo oppositi constitutus, orbem Terræ videbit, cum maxime splendet lumine quindecuplo majori præditum, quam cum hunc nobis plena est, et in illa maculas quasmaria nostra sine, perquam insignes (Fig. 4.) imo et phases lunaribus similes, non tamen eodem tempore cum his easdem cum ex. gr. apud nos novilunium est tunc Solunita pleniterrium observabit (Fig. 5.) hinc idem eclipses eodem tempore continentes, diverso quoque modo intuebitur solarem autem conspiciet cum mora maxima, dum nobis totalis Lunæ cum permagna mora apparet, et Eclipsin Terræ quæ umbra, Lunæ macula instar, per longum Terræ spatium volvi videtur, dum nobis Solis sic dicta Eclipsis in oculos incurrit.

Phases Terræ è Luna spectabiles phasibus Lunæ eodem tempore respondentis.

Novilunium.

Pleniterrium.

Plenilunium.

Novilerrium.

Ad Fig. 5.

Ad Fig. 5.
A. Novilunium
1. Pleniterrium
B. Luna falcata.
2. Terra gibberosa.
C. Luna curvata.
3. Terra gibba.
D. Luna dimidia.
4. Terra dimidia.
E. Luna gibba.
5. Terra curvata.
F. Luna gibbera.
6. Terra falcata.
G. Pleni Lunium.
7. Noviterrium.
H. Luna gibbera.
8. Terra falcata.
I. Luna gibba.
9. Terra curvata.
K. Luna dimidia.
10. Terra dimidia.
L. Lunacurvata.
11. Terra gibba.
M. Luna falcata.
12. Terra gibbera.

Facies orbis antiqui è Luna. Facies orbis novi è Luna.

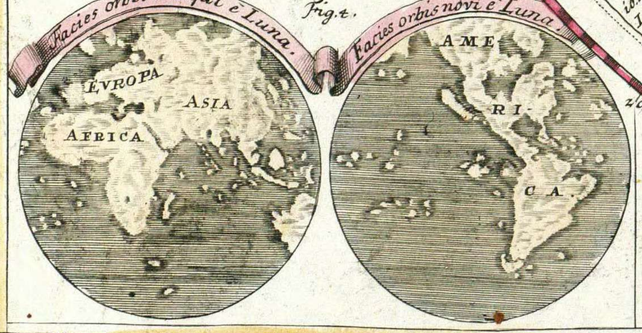


Fig. 8. Magnitudo Solis è Saturno in distantia media apparens.

Fig. 9. Diameter Solis è Jove in distantia media apparens.

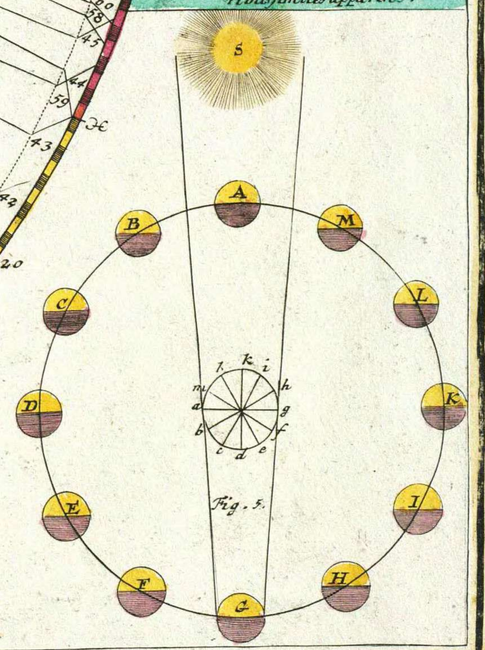


Fig. 5.

Terra è Luna pervarias Phases, lunaribus similes apparens.

ASTRONOMIA COMPARATIVA

in qua Planetarum primaria Phænomena, ad motum spectantia, Planetis nostri respectu, superioribus, Marte, Iove et Saturno sistuntur.

a IOH. GABR. DOPPELMAIERO, Acad. Imper. Leopoldino Carolinæ Nat. Curios. [illegible] que Societatum Scient. Britannicæ et Borussicæ Sodali Mathem. Prof. Publ.

Sumtibus Heredum [illegible] nianorum cum P.S.C.M.

Hypothesis Tychonica,

in qua observatoris oculus in Marte motus supponitur.

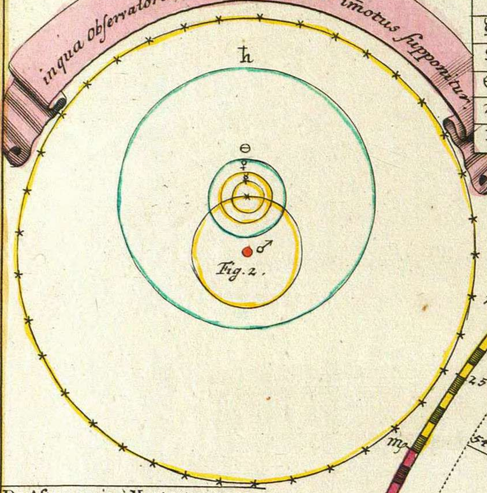


Fig. 2.

E Marte.

Inplaneta	Locus eclipsis	Ang. Inclin. Orbitæ
	Gr. Min.	Gr. Min
☿	22. 41. ♉	5. 4.
♀	10. 4. ♋	1. 54.
☉	18. 22. ♏	1. 30½.
♃	2. 41. ♒	1. 23.
♄	6. 21. ♐	2. 26.

Fig. 6.

E Iove.

In planeta	Locus eclipsis	Ang. Inclin. Orbitæ
	Gr. Min.	Gr. Min.
☿	4. 15. ♉	6. 12.
♀	1. 24. ♊	2. 12.
☉	7. 4. ♑	1. 19½.
♂	2. 41. ♈	1. 23.
♄	8. 21. ♌	1. 19½.

Fig. 7.

Hypothesis Tychonica,

secundum quam observator in Iove, nullum motum periodicum habente, constitutus concipitur.

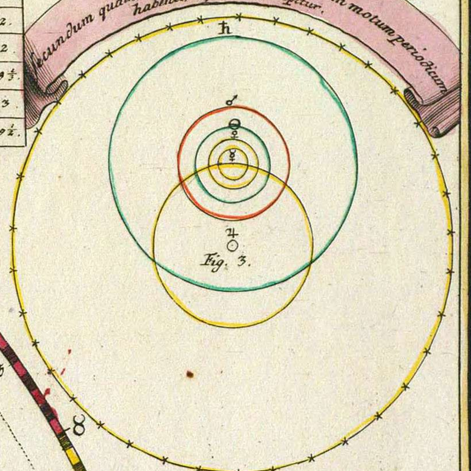


Fig. 3.

De Astronomia è Marte comparativa.

Astronomiæ addictus è Marte, cujus orbita magnam habet excentricitatem, diametrum Solis apparentem sesqui altera citer vice minorem, et sensibiliter mutabile, hinc quoque lucem et calorem duplo fere debiliorem, quam è Terra, sensu super capit; porro duos planetas superiores, Iovem et Saturnum, et è tribus inferioribus rarissime sub Sole, maculas infra, conspicuas, duos tantum extra hunc positum, Terram et Venerem videbit. Annus Martis fere duplo, et dies naturalis paulo major ese nostris, artificialis autem dies semper et ubivis, tum axis diurnæ gyrationis ad orbis ejus planum fere sit normalis, nocti æqualis, hinc exiguum discrimen inter æstatem hyememque ibidem deprehendet, quod apud nos ob magnam axis terrestris ad Ecpticam inclinationem notabile satis est.

De Astronomia è Iove comparativa.

Astronomiæ deditus diametrum Solis apparentem è Iove quintuplo circiter minorem, quam è Terra, observabit, et proin lucem et calorem illius septies et vigesies minorem quoque persentiet. Hic planeta quatuor inferiores habet, qui perraro sub Sole, tanquam maculæ, extra hunc situm vero, nunquam fere, ob solis vicinam, spectabiles; hunc defectum supplet Saturnus, qui, etsi inter superiores solus sit, attamen, aliis planetis, quinque nempe comitibus et anulo cinctus, et Iovi interdum perquam vicinus deprehenditur. Annus jovialis duodecim nostris fere æqualis est, multo minor vero ibidem dies naturalis, qui vix ad decem horas pertingit nostro et artificialis nocti fere æqualis; ubi et iterum vix ullum discrimen inter hyemem et æstatem intercedit, prout è superioribus notum est. Per noctes superficies ibidem à Sole aversa a 4. Satellitibus jovialibus semper fere abuno, duobus, sæpe ab omnibus, pro ut Terra, à nostra Luna illuminatur, sæpissime tamen iminuitur hæc illuminatio cum quam plurima, quia orbitæ illarum à Iovis orbita pauxillum tantum deflectunt; centrales et perdurabiles eclipses oriantur, hinc et non nihil luminis illic deficere necesse est.

Hypothesis Tychonica,

per quam oculus observatoris in Saturno constitutus statuitur.

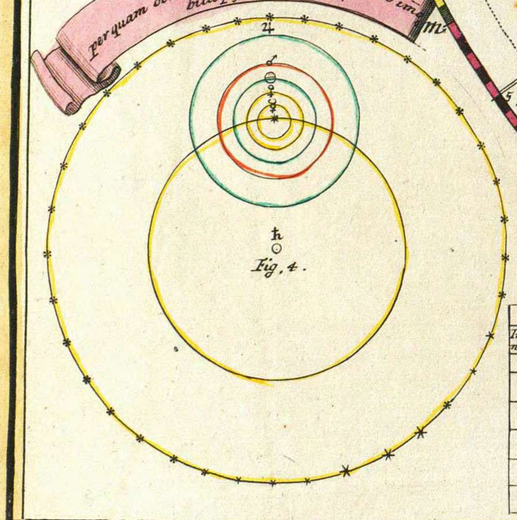


Fig. 4.

E Saturno.

Fig. 8.

Inplaneta	Locus eclipsis	Ang. Incl. Orbitæ
	Grad. Min.	Gr. Min.
☿	22: 32. ♈	6. 25¼
♀	25. 59. ♈	2. 4¼
☉	22. 38. ♑	2. 32.
♂	6. 21. ♓	2. 24.
♃	8. 21. ♍	1. 19½

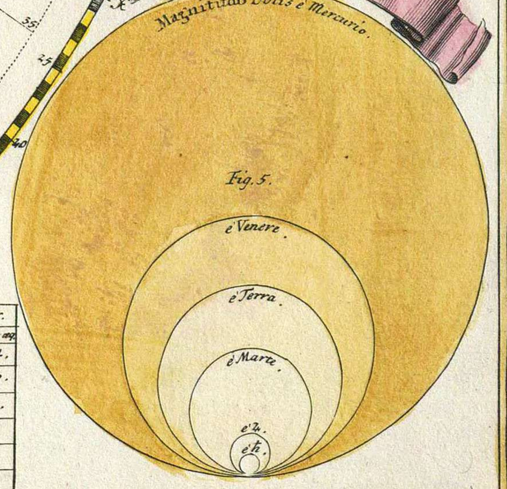
Astronomia è Saturno comparativa.

Observator in Saturno Solis diametrum apparentem decuplo fermè, lucem vero ejusque calorem non aginta circiter vicibus minorem per experientiam cognoscet. Hujus planetæ respectu omnes reliqui primarii sunt inferiores, ferè nunquam ex illo conspiciendi, si Iovem excipias, qui quatuor Satellitibus usque plurimum visibilibus, sæpatus, hunc defectum compensat. Annus in Saturno ferè triginta nostris æquiparatur, de dierum naturalium longitudine haud aliquid pro certo hactenus asserere possumus, cum periodus motûs circa proprium axem adhuc nos latitat, probabile tamen Hugenio aliisque interim visum fuit, Saturnum, prout Iupiter, comitatu cinctum æquali tempore, quo ipse, circa centrum suum volvi, dies vero artificiales per quam inæquales, et hinc differentias inter æstatem et hyemem ibidem magnas esse, inclinatio plani Æquatoris Saturnii ad planum orbitæ suæ, quæ ad 31. gradus ascendit, satis compro. bat. Cæterum annulus Saturnum cingens, spectaculum mirabundum Astronomiæ cultori præbebit, et quidem inter Æquatorem et pohm alterutrum posito, ubi per anni Saturnii semissem unam, annuli portionē à Sole illustratam, per alteram semissem, alteram portionis superficiem de die tenuiter lucentem videbit, in Æquatore vero versanti nulla fere illuminata superficies annuli apparebit, in primo situ Spectatoris portio annuli per noctem forte lumi, in altero tandem nullum fermè oculis ejusdem ingeret. hoc tamen lumen reflexum augebunt, in hemisphærio opposito Soli, Luna Saturni, qui, cum maxime à Sole in Systemate nostro remotus, ob tantam distantiam, etortam indevalide ibilem luminis reflexionem, quinque comitibus provide stipatus, cui tot eclipses, quot in Iove contingunt, cum orbita comitum multo magis ob Orbita Saturni recedant nullo impedimento erunt de quo alibi plura.

Fig. 9.

Magnitudo Solis appar.		
E	Gr. Min. Sec.	in part. sup.
☿	1. 23. 24	5004.
♀	0. 44. 30	2670.
☉	0. 32. 15	1935.
♂	0. 21. 8	1268
♃	0. 6. 10.	370
♄	0. 3. 22.	202

Proportio magnitudinis solis è quovis Planetarum primariorum apparentis.



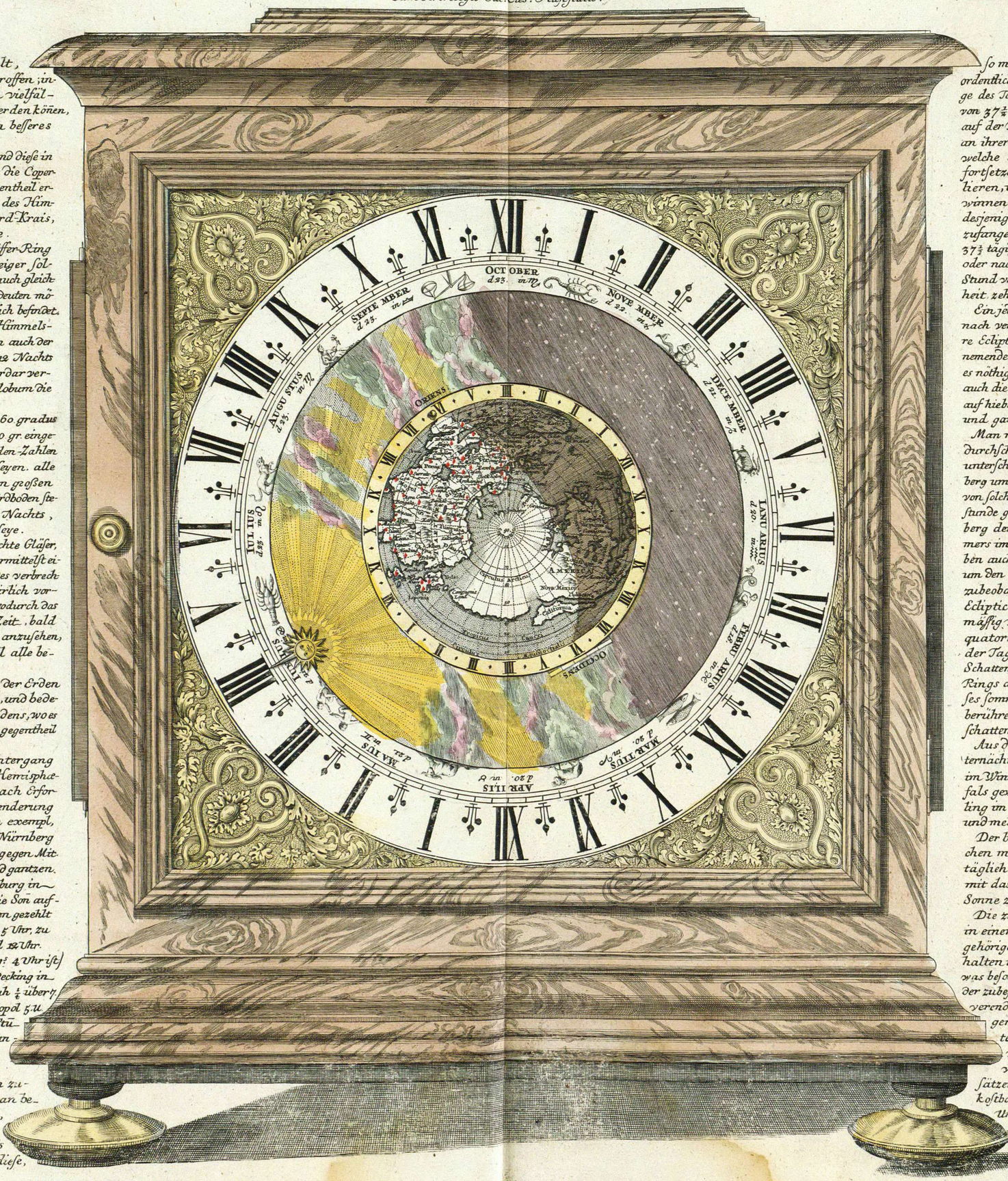
Rerum natura sacra sua non simulat: Illa arcana non promiscue
accomunibus patent, reducta et in interiore sacrario clausa sunt. Multa se-
culis tunc futuris, cum memoria nostri leverit, reservantur; exquibus aliud hæc
ætas, aliud quæ post nos subibit, aspiciet. Quid ergo ista immoratur nostram perducentur?
Tarde magna proveniunt, neque si labor cessat. Sen. Lib. VII.

IOHANN BAPTIST HOMANNS
Der Röm. Kayserl. Maj. Geographi, und Mitglied der Königl. Preuss. Societ.t der Wissenschafften
neulich erfundene

GEOGRAPHISCHE UNIVERSAL-ZEIG UND SCHLAG-UHR

An welcher, vermittelst des in 24 Stunden um die frey schwebende Erdkugel herumgehenden Sonnen-Zeigers samt der völligen Himmels Scheiben, nicht allein alle gehörige Stunden um den ganzen Erdboden durch **EUROPAM** *und* **ASIAM**, *auch halb* **AFRICAM** *und* **AMERICAM** *über allen anbemerkten Orten auf einmal zusehen, sondern auch der Natürliche Tag und Nacht mit beweglichen Liecht und Schatten, wie nicht weniger der rechte Auf- und Untergang der Sonnen, und die daraus folgende Tag und Nachts Länge aller Orten, nach Erforderung eines jeden Climatis vorgestellt, ja so gar der halb-Jährige lange Tag und Nacht unter dem Mitternächtigen Polo gantz deutlich, und der Natur selbst fast ehnlich gleich gewiesen werden. Ein Exempel dessen stellet gegenwertiger Abriß von dem lengsten Tag im Sommer vor, wann nemlich die Sonn zu Nürnberg früh um 4 Uhr auf, und in dem Arctischen Crais gar nit untergehet, weil der Nacht-Schatten solche Länder nur berühret, aber nit bedecket. Viel angeneme Vorstellungen mehr wird die lebendige Bewegung der Uhr selbst zeigen, welche auf Angeben und Unkosten des Auctoris mit unermüdeten Fleiß aufs beste verfertiget der Ruhmwürdige Meister* ZACHARIAS LANDTECK *Uhrmacher in Nürnberg.*

Cum Privilegio Sac. Cæs. Majestatis.



BERICHT
vom Nutzen und Gebrauch diser Uhr.

Obwol in gegenwertigen Abriß die äusserliche Gestalt, Form und Große des Neuen Uhr-Wercks gar wol getroffen; indem aber damit weder die lebendige Bewegung, noch vielfältige Veränderungen an derselben haben vorgestelt werden könen, so zweifle nicht, es werde folgender Bericht davon ein besseres vergnügen geben.

Die Uhr præsentirt erstlich Himmel und Erden, und diese in mitten desselben unbeweglich, nicht darum, daß man die Copernicanische Grundsätze deßwegen verwerffen, und das Gegentheil erweisen wolte; sondern allein die scheinliche Bewegung des Himmels, samt der Sonnen täglichen Umgang um den Erd-Krais, unseren Augen gemäß, annemlich vorstellen möchte.

Um dieser Ursach willen ist der äusserste grosse Ziffer-Ring in seine 24 Stunde eingetheilet, damit der Sonnen-Zeiger solche in Tag und Nacht durchwandern, und dadurch auch gleichsam die rechte Höhe und Plagam des Himmels andeuten möge, worinnen sich alsdan die natürliche Sonne würklich befindet.

Mit dem Sonnen Zeiger gehet die gemahlte völlige Himmels-Scheiben samt dem Zodiaco täglich herum, desgleichen auch der innere kleine Ziffer-Ring, auf welchem die 12 Tags und 12 Nachts Stunde (retrogrado ordine) gezeichnet, der sich immerdar verrucket, und über alle angemerckte Ort um den Erd-Globum die daselbst befindliche Stunden richtig hinstellet.

Der Erd-Globus ist optice verzeichnet und in seine 360 gradus long: durch die punctirte Meridian-Striche von 10 zu 10 gr. eingetheilt und unterschieden, damit die obenstehende Stunden-Zahlen des beweglichen Ziffer-Rings desto bequemer zufinden seyen. alle Stund wird man sehen, daß die Sonn 15. grad über den geoßen Horizon schreite, und daß, wo diese vertical über dem Erdboden stehet, es daselbst 12. Uhr Mittags, in opposito 12 Uhr des Nachts, und zu beyden seiten 6. Uhr Morgens oder des Abends seye.

Tag und Nacht werden durch einige halb beschattichte Gläser, welche in den kleinen Ziffer-Ring alle halb Monat (vermittelst eines sicheren Handgriffs) gar leicht und ohn alle gefahr des verbrechens können aus und ein geschlossen werden, gantz natürlich vorgestelt, mit abund zunemenden Liecht und Schatten, wodurch das Hemisphærium Boreale, nach Erforderung der Jahrs Zeit, bald mehr bald weniger als die helffte bedeckt, recht curios anzusehen, doch also beschaffen, daß man auf de) verfinsterten theil alle bedeckte schrifft noch deutlich lesen kan.

Der Schatte solcher Gläser auf der Nacht seiten der Erden folget dem Sonnen-Zeiger successivè accurat nach, und bedeket alle die jenige bemerckte Ort und Länder des Erdbodens, wo es in der that Nacht zuwerden beginnet, und weicht im gegentheil von den jenigen Orten, wo der Tag anbricht.

Auf solche weis ist der warhafftige Auf- und Untergang der Sonnen an allen Orten auf dem vorgebildeten Hemisphærio nicht allein gar schön zuersehen, sondern auch, nach Erforderung eines jeden Climatis und Jahrs-Zeit, die Verenderung desselben deutlich warzunemmen. Wir sehen, zum exempl, in denen lengsten Tagen des Sommers allhier zu Nürnberg die Sonne früh um 4 Uhr aufgehen, da zu gleich gegen Mittag in Aegypten bey Cairo; in der Insul Candia und gantzen Græcia; gegen Mitternacht zu Amsterdam; zu Edenburg in Schottl. und in Grönland, denen Inwoneren mit uns die Son aufzugehen pfleget, ohngeacht daselbst gantz andere Stunden gezehlt werden; dann zu Cairo ist es alsdan über 5½ in Candia 5 Uhr, zu Amsterdam über 3½. zu Edenburg 3 Uhr, und in Grönland 12 Uhr.

In eben solchem instanti (wan es zu Nürnberg, Morg.s 4 Uhr ist) finden wir, daß zu Miaco in Japonia 12 Uhr Mittags, zu Pecking in China 11 Uhr, zu Siam 10 Uhr, zu Ispaham in Persien früh ½ über 7. zu Ierusalem, Asseff und Moskau 6 Uhr, zu Constantinopol 5. u. und an anderen Orten, Städt und Länder andere Stünden und Zeit des Tags oder Nachts nach advenant anzutreffen seyen.

Die Ursach so ungleicher Zeit-Rechnung ist die Rundung der Erden, weil solche nicht auf allen seiten zugleich, sondern nur nach und nach von der Sonnen kan bestraalt werden: dahero sich auch nicht zu verwundern, daß einige, um die gantze Welt gegen Osten schiffende, einen Tag mehr, die gegen Westen aber einen Tag weniger als wir unsers Orts, nach ihrer Reise gezehlet haben; weil diese, so mit der Sonnen gegen Abend reisen, und etwan des Tags ordentlich nur 6 Teutsche Meilen zurücklegen, alletag an der lenge des Tages fast 2 minuten gewinnen, und so unvermerckt in zeit von 37¾ Tagen (nachdem sie nemlich 225 Meil, das ist 15 grad auf der Runde des Erdbodens gewandert) eine gantze Stund an ihrer tagreis-Rechnung verlieren; da hingegen diejenige, welche ostwerts gegen die Sonne mit gleichen Tagreisen fortsetzen, täglich ebensoviel minuten an der Tags-lenge verlieren, und damit die erste Stund zu ihrem Tags-profit gewinnen; weil sie die Tag-Rechnung von der Sonnen Aufgang desjenigen orts, wo sie hin, und nicht wo sie her gekomen, anzufangen ursach haben; indem sie sonst, nach zurückgelegter 37¾ tägigen Reise, des Tages anfang eine gantze Stund vor, oder nach der Sonnen Aufgang, und den garaus desselben eine Stund vor oder nach der Sonnen Untergang wider alle gewonheit zehlen müssten. p. welches alles die Erdrundung verursachet.

CONTINUATION
vom Nutzen und Gebrauch diser Uhr.

Ein jedes Clima auf dem vorgebildeten Hemisphærio empfangt nach verenderung der Jahrs-Zeit und abweichung der Sonnen in ihre Ecliptic, durch die halb beschattichte gläser, welche die abund zunemende phases des Monds bey nahe præsentiren, so viel Schatten, als es nöthig hat, sowol den rechten Auf- und Untergang der Sonnen, als auch die daraus folgende Tag und Nacht lenge anzuzeigen, welche auf hiebey gesetzte weise, ohne sondere müh, kan baldest erwiesen, und gar leicht gefunden werden.

Man mercke die zeit des Auf- oder Niedergangs (bey demjenigen durchschnitt, der die licht und finstere seiten auf dem Erd-globo unterscheidet) eines jeden beliebigen Orts; zum exempel, zu Nürnberg um 4. und zu Amsterdam um 3½ uhr: so viel stund es nun von solcher Zeit bis Mittag 12 Uhr hat, so viel zehle man widerum stunde gegen den Abend, so wird man gleich finden, daß zu Nürnberg der Tag 16. und zu Amsterdam 17 stund lang des Sommers im Junio seyn müsse. Eine gleiche Tag-lenge mit diesen haben auch alle die jenige Ort, welche parallel, das ist in einem gleichen um den Pol gezogenen circular strich gelegen; wobey absonderlich wol zubeobachten, daß durch die abweichung der Sonnen in ihre Ecliptic, fast aller Orten auch die Lenge des Tages sich ebemäßig verendere, und allein der hitzige Erdstrich des Æquatoris solcher Taglenge-verenderung befreyet seye, weil der Tag und Nacht daselbst allezeit gleich ist: dahero der Schatten an denen Gläsern auf beyden seiten des kleinen Ziffer-Rings allezeit von VI. zu VI. gezogen; es mögen gleich die phases sommerszeit so klein seyn, daß sie den Arctischen Creis kaum berühren, oder winterszeit so groß, daß sie denselben völlig überschatten.

Aus diesem fundament der gäntzlichen Überschattung des mitternächtig Erd-Wirbels wird die merckwürdigste Nachtlenge im Winter, wie der lengste Tag im Sommer, an dieser Uhr gleichfals gewiesen, da von dem Herbst-Æquinoctio an bis in Früh-ling im 90 gr. lat. eine halbjährige Nacht, wegen immer mehr und mehr zukommenden Schattens, sich præsentiret.

Der bewegliche Ring des Zodiaci, auf welchem die zwölff Zeichen mit den namen der Monaten gestochen, geht mit der Son täglich herum, muß aber alle Monat verschoben werden, damit das rechte Zeichen und namen des Monats gleich über die Sonne zustehen, allezeit kommen möge.

Die zur abwechslung dienlich halb beschattichte Gläser werden einer, am unteren theil des Uhr Geheußes verborgenen und gehörige fächlein eingetheilten Schubladen, gar füglich aufbehalten und wol verwahret: der Gebrauch solcher gläser aber ist etwas besonders, und leichter mit der hand zu weisen, als mit derselber zubeschreiben, jedoch gantz leicht, und fast augëblicklich zu verenderen. Übrigens bestehet die Uhr aus wenig, aber sehr wol gemachten Raderen, mit welchen dannoch an ihrer fröte so viel gewiesen wird: wiewol man gerne gestehet, daß weil alle erste Inventiones mit keiner Vollkomenheit hervorzukomen pflegen, auch dieses Werck mit neuen Zusätzen leichtlich zuverbesseren, und sonderlich mit einem kostbaren und ingenioßen Uhr-Geheuß zuverherrlichen seye. Unterdessen aber werden die curiose Liebhaber mit beygefügten Abriß samt dem bisherigen Bericht vei liebnemē und dergleichen Geographischen Conatibus mit fernere propension zugethan, gewogen verbleiben.

Projectio Orthographica Telluris.

Die verfinsterte Erdkugel
d. i.
GEOGRAPHISCHE VORSTELLUNG
der **SONNEN- od. ERD-FINSTERNIS**
den 25.ten Iulii A.o 1748.

wie solche so wohl nach ihrer Groesse als Figur und Veränderung auf der Oberfläche der Erden in Absicht der bedeckten Länder und Oerter sich verhält. Auf das Fundament der Eulerischen Sonnen und Monds Tafeln nach den orthographischen Gründen stereographisch in 2. Blättern verzeichnet von Georg Moriz Lowitz.

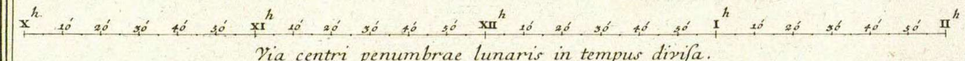
I.ter Blat.

in welchem die Figur, Grösse und Veränderung des Halbschattens auf der Oberfläche der Erden in 3. Halbkugeln auf 3. verschiedene Zeiten dieser Finsternis nebst dem Weg des Mittelpuncts vom Halbschatten auf derselben angezeiget wird.

Herausgegeben in der Homaenischen Officin.
A.o 1747. M. Decemb.

Fig. I.

Illustri ac per omnem Europam
celeberrimo Viro
D.no LEONHARDO EVLERO
Acad. Imperial. Petropolit. Professori honorario,
Regiæ Societ. Sc. Anglicanæ Sodali, nec non Classis mathemat.
in Academia regia sc. Borussica Directori et
Professori Regio
Fautori suo singulari pietate ætatem colendo utramq
tabulam **Orbis eclipsati et Europæ eclipsatæ**
in æternum monumentum consecrat
Georgius Mauritius Lowitz,
tanti nominis sincerus cultor.



Via centri penumbrae lunaris in tempus divisa.

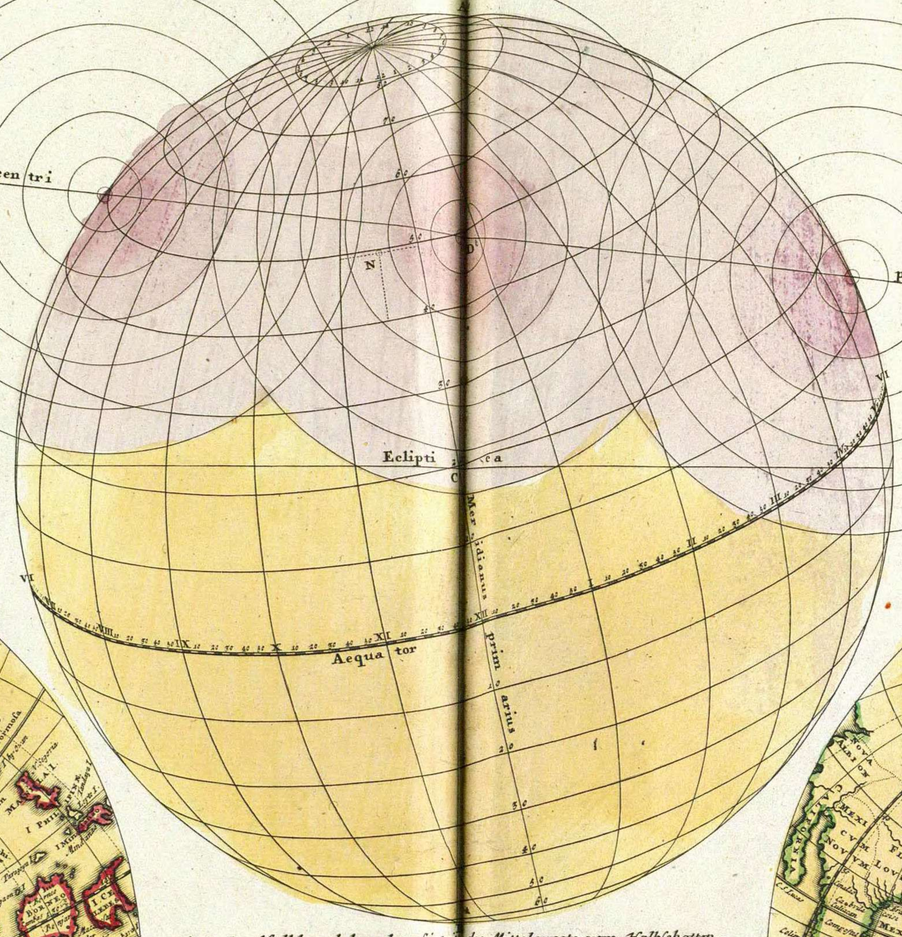


FIG. I. *Halbkugel bey dem Centro des Mittelpuncts vom Halbschatten.*
FIG. II. *Halbkugel mit dem Halbschatten zur Zeit des Neumonds.*
FIG. III. *Halbkugel mit dem Austritt des Mittelpunets vom Halbschatten.*

Fig. II.

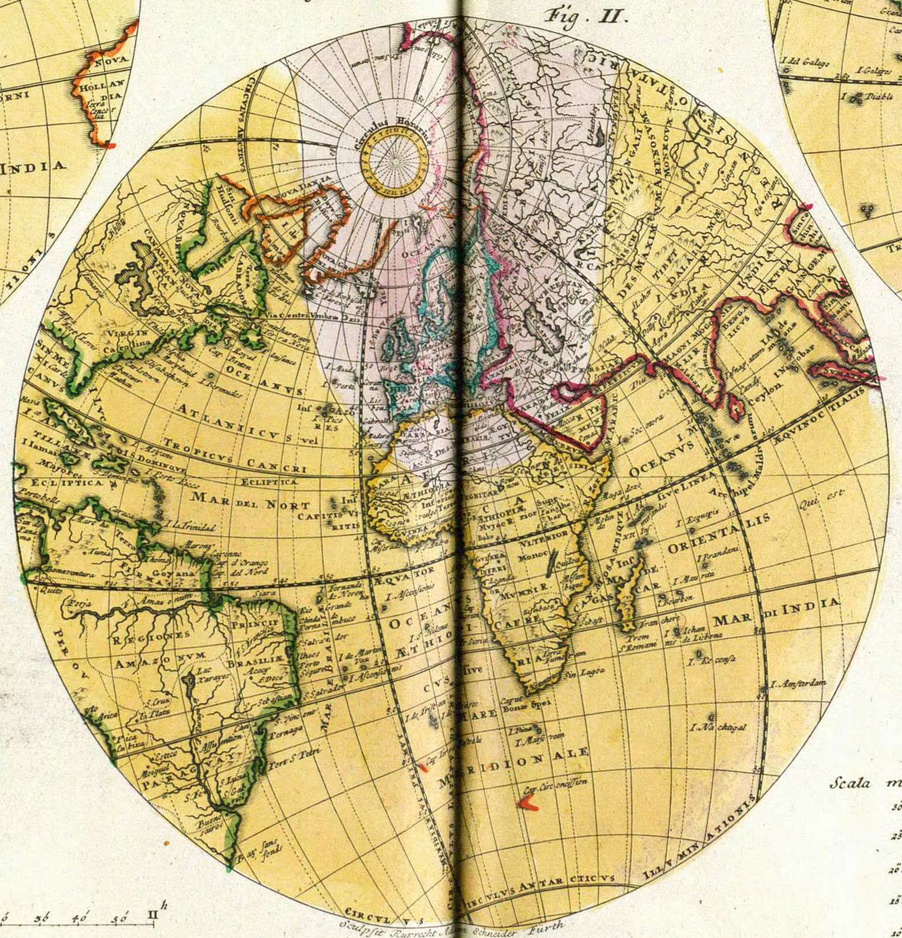


FIG. I. *Hemisphere par rapport à l'entrée du centre de la penombre.*
FIG. II. *Hemisphere avec la penombre au tems de la nouvelle Lune.*
FIG. III. *Hemisphere avec la sortie du centre de la penombre.*

le Monde Eclipsé
ou
REPRESENTATION GEOGRAPHIQVE
DE L'**ECLIPSE** DE LA **TERRE** OV DV **SOLEIL**
qui arrivera le 25. Iuillet 1748.

faisant voir l'Etendue de la grandeur, de la figure et de sa variation sur la surface de la terre, à l'egard des päis et villes, qu'elle couvre. Dessinée sur le principe des tables solaires et lunaires de Mr. **Euler** selon les regles orthographiques, stereographiquement appliquées, en deux feuilles par George Maurice Lowitz.

Premiere feuille.

Representant la figure, la grandeur et la variation de la Penumbre sur la surface de la terre en trois Hemispheres, concernant 3. divers tems de cette Eclipse avec le Chemin du centre de la Penombre.

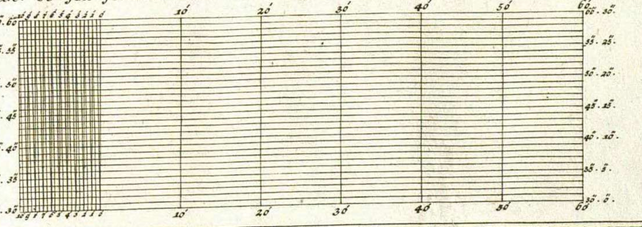
Publiée dans le Bureau Geographique de Homann. L'An 1747. Avec Privil. Imperial.

Fig. III.

Momenta Calculi eclipseos hujus sequentia sunt:

Tempus verum Novilunii veri Berolinense 1748. d. 25. Iulii	h 0. 9. 52. pomer.
Longitudo ☉ et ☽ vera	♌ 2. 43. 20.
Latitudo ☽ vera	0. 27. 57. Bor. decr.
Inclinatio orbitae ☽ ad Eclipticam vera	5. 16. 52.
— — — — — — *adparens*	5. 45. 53.
Horarius verus ☉	0. 2. 25.
— — — — — ☽ *in Ecliptica*	0. 29. 44.
— — — — — ☽ *a ☉ in Eclipt.*	0. 27. 21.
Diameter ☉ adparens	0. 31. 34.
— — — ☽ *horizontalis*	0. 30. 14.
Parallaxis ☽ horizontalis	0. 54. 25.
Longitudo Parisiorum	20. 0. 0.
— — *Berolinensis*	31. 9. 0.

Scala min. 60. seu secund. 3600. circuli sphaerae, cui Schemata haec sunt adaptata:



Prostat in Officina Homanniana Norimb. 1747 – C. P. S. C. M. G.

In den IV. Figuren ist diese Sonnen-Finsternis oder Bedeckung der Sonne von dem Monde so wohl der Zeit als der Gröſse nach vorgestellt, und zwar wie sie zu observiren.

I. zu Berlin.
II. zu Nürnberg.
III. zu St. Petersburg.
IV. zu Rom.

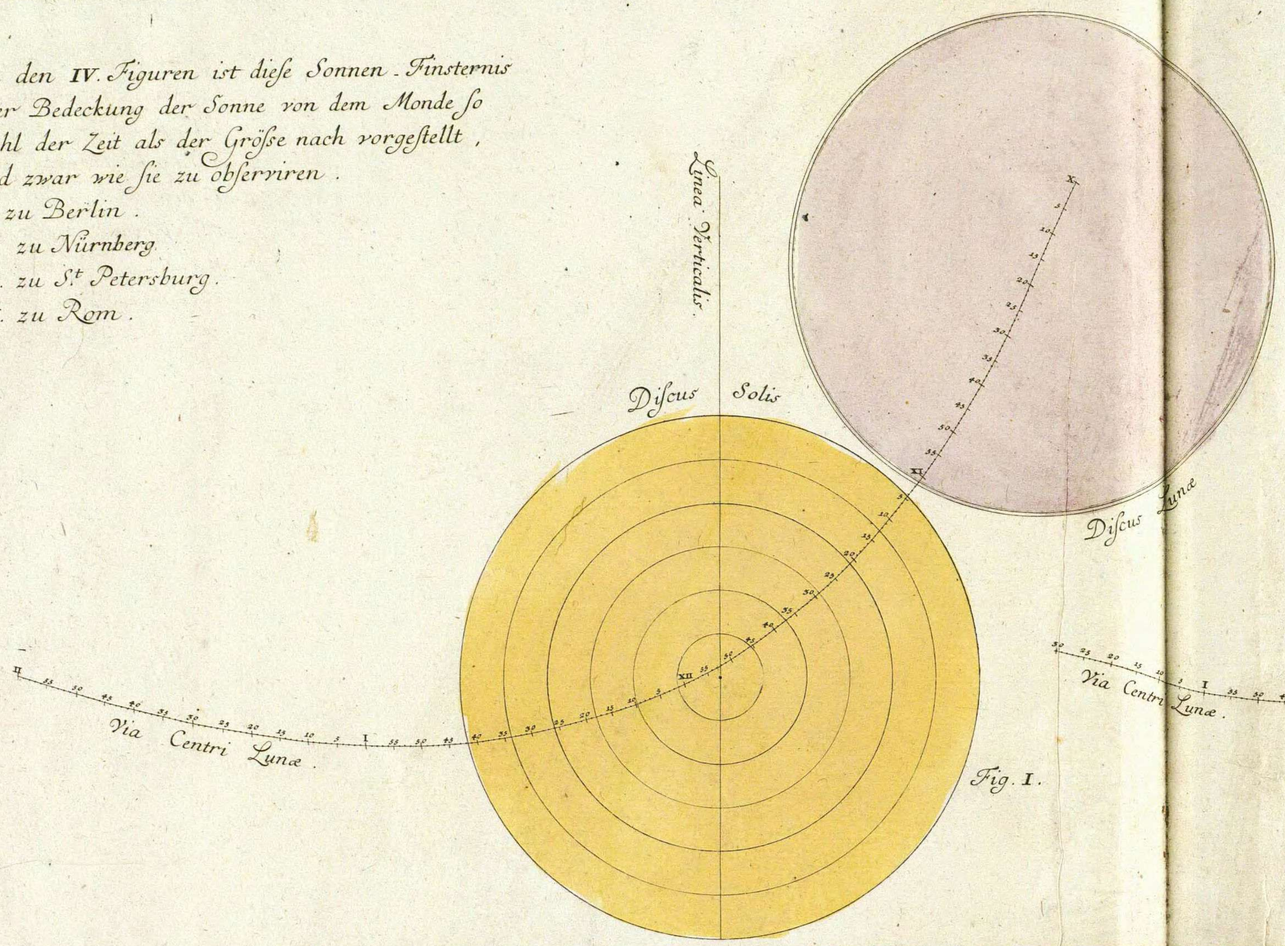


Fig. I.

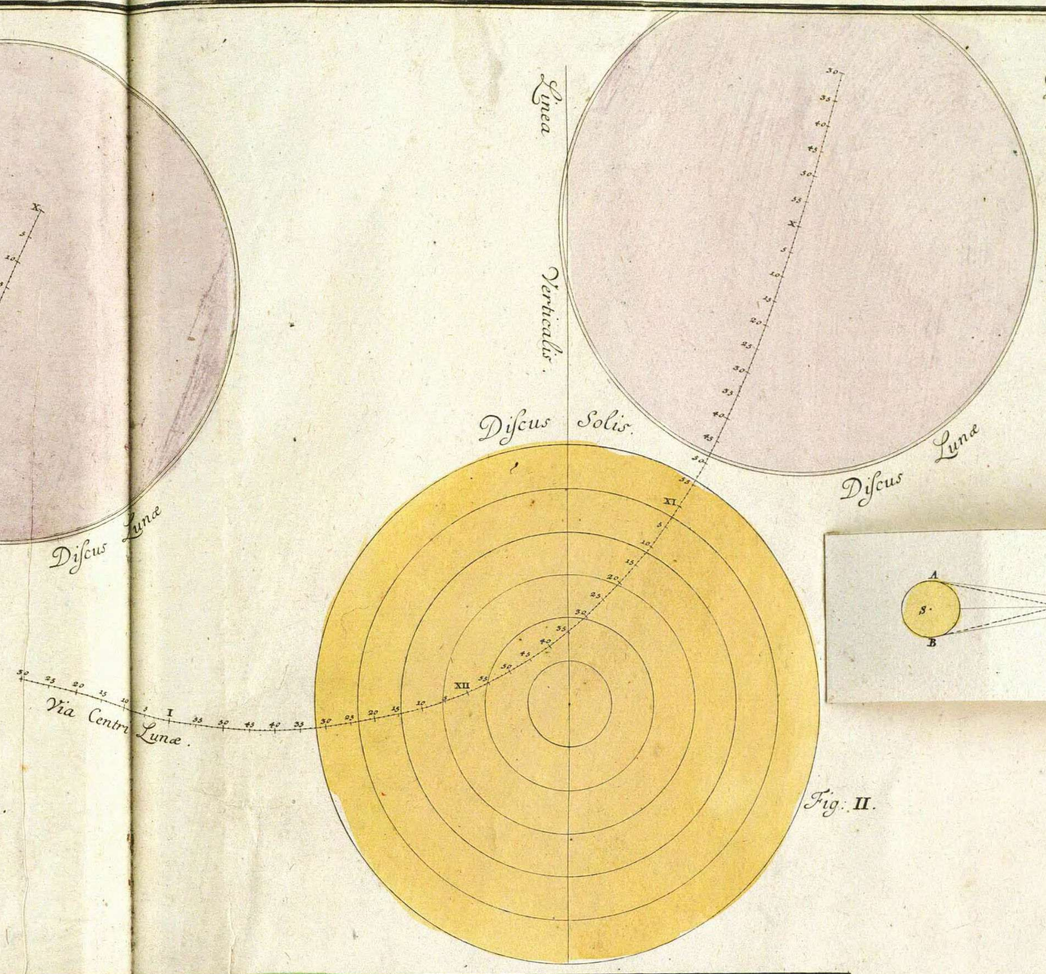
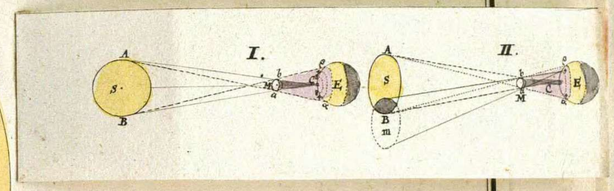


Fig. II.

Les IV. Schémes font voir l'occultation du Soleil par la Lune tant a l'égard du tems que de la grandeur.

I. Fig. se rapporte à Berlin.
II. ..... à Nuremberg.
III. ..... à St. Petersbourg.
IV. ..... à Rome.



VORSTELLVNG der SONNEN- oder ERD FINSTERNIS den 25 Jul. 1748.

Zweytes Blat.

In welchem der Weg des Mittelpuncts vom Halb-Schatten so wohl als die übrigen theile der Finsternis in Absicht auf die Örter von Europa ins besondere vorgestellet, und in erste Minuten Berliner Zeit eingetheilet ist.

Wobey noch einige Stücke beygefüget sind, in denen diese Erd Finsternis auf etliche Orte als eine Sonnen-Finsternis oder Bedeckung der Sonne vom Mond betrachtet wird.

Von allem, was in dieser Karte zu sehen, gibt die besonders gedruckte Erklärung mehrere Rechenschafft.

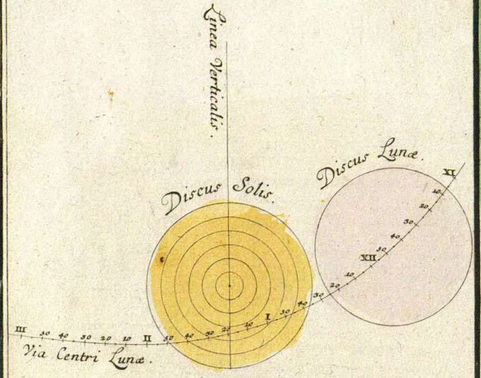


Fig. III.

EVROPA ECLIPSATA
d. XXV. Iul. A. MDCCXXXXVIII.
designata stereographice
a Georgio Mauritio Lowizio.
Impensis Homannianis. Norimb.
1747.
SCALÆ MENSVRARVM.
Milliaria Germanica quorum 15. in Gradu.
Leucae Gallicae minores 25. in Gradu.
MARE GERMANICVM vulgo DE NORD ZEE
MARE MEDITERRANEVM
MARE NIGRVM
I. Oeland
I. Gotland
I. Minorca
I. Mainland
Insulæ Orcades
Insulæ Schetland Hiltand
PENINSVLA
EUROPA
ASIA
AFRICA
TATARIA MINOR
GRÆCIA
HVNGARIA
POLONIA
RVSSIA
SVECIA
NORVEGIA
GERMANIA
GALLIA
HISPANIA
ITALIA
BRITANNIA
I. Dig. Bor.
II. Dig. Bor.
III. Dig. Bor.
IV. Dig. Bor.
V. Dig. Bor.
VI. Dig. Bor.
VII. Dig. Bor.
VIII. Dig. Bor.
IX. Dig. Bor.
X. Dig. Bor.
XI. Dig. Bor.
XII. Dig. Bor.
I. Dig. Austr.
II. Dig. Austr.
III. Dig. Austr.
IV. Dig. Austr.
V. Dig. Austr.
VI. Dig. Austr.
VII. Dig. Austr.
VIII. Dig. Austr.
IX. Dig. Austr.
X. Dig. Austr.
XI. Dig. Austr.
XII. Dig. Austr.
I. Dig. Occid.
II. Dig. Occid.
III. Dig. Occid.
IV. Dig. Occid.
V. Dig. Occid.
VI. Dig. Occid.
VII. Dig. Occid.
VIII. Dig. Occid.
IX. Dig. Occid.
X. Dig. Occid.
XI. Dig. Occid.
XII. Dig. Occid.
I. Dig. Orient.
II. Dig. Orient.
III. Dig. Orient.
IV. Dig. Orient.
V. Dig. Orient.
VI. Dig. Orient.
VII. Dig. Orient.
VIII. Dig. Orient.
IX. Dig. Orient.
X. Dig. Orient.
XI. Dig. Orient.
XII. Dig. Orient.
I. Dig. Centr.
II. Dig. Centr.
III. Dig. Centr.
IV. Dig. Centr.
V. Dig. Centr.
VI. Dig. Centr.
VII. Dig. Centr.
VIII. Dig. Centr.
IX. Dig. Centr.
X. Dig. Centr.
XI. Dig. Centr.
XII. Dig. Centr.
VIA CENTRI
M. Dig. Centr.
M. Dig. Bor.
M. Dig. Austr.
M. Dig. Occid.
M. Dig. Orient.
M. Dig. Centr.
I. Dig. Mer.
II. Dig. Mer.
III. Dig. Mer.
IV. Dig. Mer.
V. Dig. Mer.
VI. Dig. Mer.
VII. Dig. Mer.
VIII. Dig. Mer.
IX. Dig. Mer.
X. Dig. Mer.
XI. Dig. Mer.
XII. Dig. Mer.
I. Dig. Occ.
II. Dig. Occ.
III. Dig. Occ.
IV. Dig. Occ.
V. Dig. Occ.
VI. Dig. Occ.
VII. Dig. Occ.
VIII. Dig. Occ.
IX. Dig. Occ.
X. Dig. Occ.
XI. Dig. Occ.
XII. Dig. Occ.
I. Dig. Ort.
II. Dig. Ort.
III. Dig. Ort.
IV. Dig. Ort.
V. Dig. Ort.
VI. Dig. Ort.
VII. Dig. Ort.
VIII. Dig. Ort.
IX. Dig. Ort.
X. Dig. Ort.
XI. Dig. Ort.
XII. Dig. Ort